Introductory Lecture

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By J. RUSSELL REYNOLDS, M.D., F.R.C.P.,

SPECIAL PROFESSOR OF CLINICAL MEDICINE IN UNIVERSITY COLLEGE, AND PHYSICIAN TO UNIVERSITY COLLEGE HOSPITAL.

GENTLEMEN,—The office of "Special Professor of Clinical Medicine," which it is my honour to hold in University College, has furnished me with opportunities for the study, not only of patients, but of students; and I purpose to-day to present you with some of the results of those clinical observations which I have made upon the latter.

The term "clinical lecture" is often applied to a discourse delivered elsewhere than at the bedside of a patient. In like manner a familiar phrase is often used to denote a species of exhortation, or it may be rebuke, administered at other times than in the hush of night, and under circumstances of less privacy than the "curtain" might secure. If, then, I denominate the remarks I am about to make, "a clinical lecture upon students," common professional usage of words will be on my side, if strict etymology is not; for those remarks, although delivered in the theatre, are founded upon observations conducted, for the most part, in the wards. And if anything I may say should seem to have the tone of exhortation or rebuke, I wish you to think that such message comes to you from the other side of the curtain, where lies the patient, not any individual patient, but the great suffering world, which is at once our study and our care.

It is towards clinical work that all medical study tends; it is at the bedside of the patient that our "science" culminates, and becomes an "art." The "case" with which we come in contact is, as it were, the "medium" through which "correlated forces" become exchanged; or, to alter the figure, the "reflective centre," in which all the "knowledge" we have laboriously gathered from without, becomes converted into "power" for the patient's good. It is well, therefore, to keep this end in view, and to regard all our studies in this, their high relation. The bedside of the patient is the point from which to value correctly all scientific medicine; and it is from this stand-point that I would now address you. And in delivering a clinical lecture upon students I shall not depart from the plan I usually adopt, but shall commence by giving you a picture of the cases that I wish to bring before you—they are five in number. After having described them, I shall advance to a consideration of their pathology; but, first, let me sketch these cases as you may have seen them, and may again see them, in our wards.

CASE 1.—Cyrus Vane Velox is between nineteen and twenty-four years of age. His last year or two have been nominally spent at the College. It was observed while he was there that his attendance upon lectures often assumed a remittent form; that occasionally prolonged intermissions occurred; that the intervals between his paroxysms of attendance gradually increased in length; and that some curious repulsive influence seemed to become developed, not only between himself and the lecture-room, but between himself and the professor; for it was noticed that upon each period of his return he withdrew himself further and further from the professor's position in the lecture-room or the theatre. At first he sat in the lowermost row of seats, and occasionally took notes of the lectures that were delivered; but afterwards, having eaten his pens, he was reduced to the necessity of making such notes and illustrations as he could with his penknife on the surface of the benches. A disadvantage attached to this process was, that he could not carry these notes away for private use; but he succeeded in taking his note-book away, and it was subsequently ascertained to have passed gradually from the desk to his pocket, from his pocket to his locker, and he appeared quite devoid of it after a little time, having substituted for it a walkingstick, the proximal extremity of which he usually kept in his mouth as he sat at the top row of the theatre, or removed it from that locality only to make slightly audible rhythmic movements upon the floor. Another fact noticed about him was that the commencement of his attendance upon individual lectures became gradually delayed; so that on one week it was five minutes past the hour before he arrived, the next week ten minutes, and so on until he disappeared altogether. A curious infirmity affected him in the dissecting-room. He was usually seen seated between his "upper" and his "Ellis," as unhappy as if he were about to be dissected himself; and looking abjectly into mid-air, as if he expected that anatomical knowledge might, by some strange occult projection, penetrate his own "head and neck," and perchance remain there. But instead of this happy result, he soon verified in his own experience the old anatomical and physiological discovery, that there is a passage by which truth that has entered in at one ear may very readily pass out at the other. And so, instead of "cleaning the muscles," he cleaned his scalpels; cut up his "part," or allowed some one to do it for him; and promised to himself to "get up his anatomy," at some time or another, by the aid of one of those rotatory machines which must be nameless.

Having thus finished at the College, he came across to the hospital, and was admitted. A delay appeared to attend his admission; and, in a chronic form, it affects him still. It takes him generally from ten to twenty minutes to get through the lobby of the hospital, and he has been known sometimes—so great is the obstruction—to get no further. A casual observer might think he was not trying to effect the passage, as he often seems to be standing with his face to the street, conversing with others afflicted like himself, and producing severe "portal congestion" of the institution; or sometimes talking even to the out-patients as they pass the door into their waiting-room; but his conversation has not, so far as I have observed, been directed to the discovery of their diseases; his principle of selection amongst these out-patients, who are rarely if ever of the male sex, appearing to be rather closely associated with the presence of good looks, and the not very conspicuous presence of modesty. The stick, with which he broke out a year and a half ago, is still visible; there is often a want of correspondence between the vertical line of his body and the median line of his hat; and the detrusion of the latter towards one or the other side has of late shown a marked tendency to increase. This little symptom has been observed a great many times, and its exacerbation has been thoroughly established. There can be no doubt of the correctness of the observation, for our patient usually keeps on this appendage of his when others are in the habit of removing theirs. After, however, the considerable delay occasioned in the manner I have described, our case arrives in Ward III., and the "present state," as entered in my note-book, is as follows:—

C. V. V., found sitting, with his hat on, upon the corner of the table in the middle of the ward; thus, during the early part of the visit, maintaining as great a distance as he conveniently can between himself and the patient first examined. Moving gradually towards the fire-place, he places his back opposite that calorifying arrangement, so that he can take a comprehensive view of the ward by seeing all the patients it contains at one glance. He yawns frequently, comes into the outermost circle of students around the bed, looks first over the shoulders and then under the axillæ of those in front of him, fails to see anything of the case under examination, and so talks and jokes with his nearest neighbour, not loudly, but in a tone which does not materially assist those who are commencing the practice of auscultation. He walks to a distant bed, looks knowingly at the bed-card, sees the patient's name, age, and occupation; makes his diagnosis by reading that which is written on the card; judges of the treatment by smelling the bottle of physic; is thus able to say there is a case of rheumatic fever in Ward III.; and having ascertained that important fact, he seizes an opportunity, when the physician appears to be looking the other way, and rather quietly,—out of consideration, let us now hope, for those who are listening to cardiac murmurs,—he takes his leave. The periods of his return to the wards are singularly uncertain; but it has been observed that they bear some curious relation to lunar time, and that they are often synchronous with the recurrence of those days on which the names of students have to be entered in the book kept near the door. It was most mercifully arranged that this book should be kept so near the outer door, for the fatigue occasioned by effecting the passage of the lobby was often so great that all our patient could accomplish, after he had encountered it, was sometimes to take fresh air in the operating

theatre, or entrance to the dead-house, or, when not equal to those exertions, to return into the street. Towards the end of each session there is a singular propensity for his reappearance in the wards; and it has occurred to some of the medical staff that this may be determined, in some mysterious manner, by the presence of an unsigned schedule in the pocket. I do not insist upon this explanation; but, whatever may be the theory, the fact is one which has been frequently observed, and which I have no doubt some of you will observe again.

There are a few negative characters in Vane's case that are worthy of notice. He never obstructs the house-surgeons or physicians' assistants in their morning duties. It is confidently asserted by some who know him that he was never seen in any one of the wards before one o'clock. Again, he has never complicated the work of the physicians and surgeons in selecting either clerks or dressers by placing his name upon the list of candidates for those most valuable appointments. It is a rule of the hospital that no one shall appear in the area of the dead-house, during a post-mortem examination, except the physician or surgeon, and his assistants engaged in conducting it. This rule, often broken by others, C. V. most diligently observes; and indeed he is so scrupulous to avoid even the appearance of this evil that he absents himself altogether from the room. He may, however, be observed in the operating theatre when there is anything exciting to be seen; but even in this place he is faithful to the law of his being—viz., that of maintaining as great a distance as is possible between himself and the object he is supposed to study; and it is well known that he never makes himself acquainted with a case before it is submitted to operation, and that he never troubles himself to learn its subsequent history. Thus his view of the nature and value of operations is somewhat broad, and the breadth of his view is often expressed somewhat freely. I remember one of the family of young Vane, who was in hospital some years ago, giving very decided criticisms upon the operations of Mr. Liston, and enlightening the students of his own class as to the improved manner in which he should have treated the case had it been so fortunate as to have been placed under his care. You will often find this combination of great learning and great modesty, just as you do elsewhere that of great ignorance and great presumption; they are two affections having an interesting clinical association, developed often *pari passu*, and forming as it were the right and left handed accomplishments of a college course as it affects an individual like young Vane Velox.

Enough has been said to enable you to recognise the case. I shall advance to a consideration of its pathology by-and-by, but will now sketch for you another type of malady by which some students have been known to be affected, and which was well represented by—

CASE 2.—David Superficialis Hurry. This gentleman entered college, dissecting-room, laboratory, and hospital at once, and he has been in all of them ever since. He was in his fourth year at the time my notes of his case were taken, and this was his "history." He had attended and taken notes of every lecture that it was possible for him to attend; sometimes, indeed, so busy was he, that he gave finishing touches to his notes of that on physiology while the lecture on chemistry was going on. He had dissected the body several times in all its parts. He had gone through the courses of "practical chemistry" and "practical histology." He had been both clerk and dresser. He had taken notes voluminously. There was a very complete body of medical science in his reams of manuscript. So large was it, however, that it was like the Sphynx upon a close examination; and D. S. H. wandered and climbed over it in vain to find the features, the facts or principles that he wanted; but he had the satisfaction of believing, as he looked upon his shelves, that they (the facts or principles) were there; and he hoped that upon some future occasion he should be able to sort this objective knowledge, make a catalogue and index of the library he had created, and turn it to his real advantage. As yet, however, he had found no time for this worthy end. He was generally in a desperate hurry; the day was too short for him, and the night often saw him performing the well-known process of "consuming midnight oil" in the futile attempt, between his snatches of sleep, to bind into bundles the numerous broken sticks of science he had so assiduously gathered through the day. His great trial was that he could not manage to be in two places or hear two or more lectures at the same time. The attempt to accomplish this he had relinquished; but often, even recently, he was known to have tried to do some two or more things at once, and this he performed with the success commonly attendant on that process.

Now in his fourth year he comes before us in Ward III., at two P.M. He has seen all the patients in the hospital this morning, having "gone round" at a "double quick," with or without the house-surgeons or physicians' assistants. He is fresh from an operation, where, one of the dressers being absent, his fingers, ever ready, were found of use: he is bent upon a post-mortem examination to come off immediately; the clerk is away, and he is to take the notes. The skin department, the eye department, the dental surgeon, the obstetric physician, have all been attended at their proper times. There is not an inquest at which, somehow or other, his evidence is not required; not an accident which does not fall in his way. He is even present in the casualty room at midnight, whenever a drunken cabman is brought in for the stomach-pump and cold affusions. He feels the crepitus of every broken bone; he hears something of every cardiac murmur; he percusses every morbid chest; he handles every morbid specimen. He seems almost as ubiquitous as he could wish to be; he is up both early and late; he gives himself no time for rest, no time for play. He is in a condition of educational pyrexia, and even when he sleeps exhibits a "low muttering delirium" of broken bones, triple phosphates, rheumatic fever, and typhoid spots.

The case of D. S. H. is an example of extreme disturbance, and is interesting on account of the rarity with which the affection is met with when carried to so high a degree of intensity. It usually proves fatal long before it has reached this pitch. But the same malady, milder and somewhat modified in character, is very commonly observed. Cases radiate around types, which may be regarded as the centres of large groups of diseases; and it is convenient, for the purpose of contrast, to describe these types. I wish you, therefore, to retain Hurry in your memory, for I shall have presently to analyse his affection; but before doing so, I must bring under your notice another case, equally important and interesting: that of—

CASE 3—Chemicus Profundus, who is a fair specimen of a malady not very unfrequently to be observed in our wards. C. P. had a taste for chemistry when he was quite a boy, and upon several occasions horrified his venerable parents by his early scientific experiments. Once he wrote with phosphorus upon their bedroom walls, so that some ghastly letters gleamed at them in the dead of night, when their rushlight accidentally went out, and they started with terror equal to that of the guilty Belshazzar at the incomprehensible writing of his doom. Upon the occasion of a small family party, he mixed that faithful article of the tea-table, carbonate of soda, with pounded sugar just before it was to be eaten with red-currant tart, so that the said tart effervesced most energetically upon the plates of the guests and lost the charm of colour. During his apprenticeship, when, as became the dignity of his new position, he of course gave up childish tricks, he was noticed by his master to care little for anything but the chemistry of that early period of his career. True, he looked at the bones of the well-articulated skeleton that hung in the surgery cupboard; and he advanced in osteological study so far as to know the occipital from the astragalus; but his chief delight was found in calcining some bones and dissolving others. True, he learned the difference between exogens and endogens—between mammalia and insects; but his favourite occupation was to catch the gases that rose from the valisneria leaves in the aquarium, to experiment on every drug in the dispensary, and to compose and decompose multitudinous mixtures which were not prescribed for the patients in his master's day-book. When he entered this College, four years ago, his eyes gleamed with delight over the syllabus of our chemical professor's course, and he attended the lectures on his favourite science with a zeal and regularity that were to himself both profit and pleasure. He was always at his post, and between the hours of lecture was to be found in the library diligently mastering, step by step, the grand science that was brought before him. Books differing in opinion helped him to understand each other; and he often put his theoretic knowledge to the test of experiment. The other students knew well that he could help them in their puzzles, and he was often appealed to with success to solve some mysteries that had defied their efforts. He attended the other lectures of his year; he dissected; and was a diligent student generally. He competed for honours in the classes of Anatomy and Physiology, but obtained only very low certificates; while of course he gained, as everyone knew he would do, the gold medal in the class of Chemistry, and his papers were such as have seldom been presented by any student of the College.

At length he came over to the hospital for clinical study. His honours at once secured for him the office of clinical clerk, and here he had many opportunities for considerable chemical research. He ingeniously managed always to secure for himself those cases in which some special interest attached to the examination of the secretions, and these he noted with a careful-

ness that did him the highest credit. But it may be observed, now that his clerkship is completed and he is pursuing his own way in the wards, that he often passes over some of the most important features of a case in order that he may be quite accurate about some, as yet understood, unimportant detail. It is said that C. P. could tell you correctly all the daily changes in the urine of each case of pneumonia, chorea, and gout that has presented itself during the last twelve months; but that he would be puzzled to distinguish a case of pneumonia from one of bronchitis and that there are many forms of disease of which he scarcely knows the names. A relative of C. P., who was in the hospital some years ago, exhibited a similar affection, but it took another form; and the result in him was that he was thoroughly *au fait* in all chest diseases: his ear was tuned to the detection of the very finest departures from healthy sound; "he knew," as his fellow-students used to say, "his Walshe by heart;" but he was sorely perplexed to make a diagnosis when examined for the office of physician's assistant. Indeed, the case was one that baffled him completely. He made out the presence of sonorous rhonchi in the chest; he was confident that he heard some fine crepitation at the junction of the middle and lower thirds of the posterior surface of the left lung—the resonance was defective there; and he occasionally caught, as it were, the dubious ghost of some grazing friction. On these points he was as clear as noonday; but he failed to see that the patient was suffering from measles!

The last class of cases that I wish to bring before you is, I am glad to say, far from uncommon in our hospital. Perfect examples we do not expect to find often; it is rare for any case to resemble exactly that which is described in books. Nature does not move in the narrow ruts or lines along which our thought seems, as it were, compelled to travel. But again I say it is useful to consider types; and—

CASE 4—Orbicularis Goodman, is a fair type of the class to which he belongs. His brother—(CASE 5) Longitudinalis—is here also. Their family and early history is the same; they are very much alike. I shall point out their differences as I proceed. Both brothers diligently attended to their College duties, having prepared themselves to enter upon these studies by some acquaintance with general physics, and with those laws of thought which regulate all forms of scientific inquiry. They studied equally each branch of knowledge; became competent, by their acquaintance with anatomy, physiology, and chemistry, to comprehend the principles of morbid change in both function and structure of the body. They attended lectures, when professing to attend them, with punctuality and regularity; but they did not waste time by going uselessly over the same ground again and again. They did not lose the continuous thread of information which a course of lectures can supply; but having gained that, they used other means to confirm and enlarge their knowledge. They asked themselves and others, before commencing the study of a subject, what it was that they were about to learn. They acquired, as it is most important to acquire, some knowledge of the subject to be known; and thus they understood what it was they wanted to learn when they came to the hospital to use their own eyes, hands, and ears in the observation of disease. In their clinical work it may be seen that they follow this general plan. They attend for a time the practice of one physician or surgeon, and then for a time that of another. They pay special attention to four or six cases, endeavouring to select those which are examples of the same or of allied diseases; they compare them with each other; they compare them with written descriptions of such diseases; they endeavour to make out the causes of symptoms, and their relations with one another; they hear what is said about them by the physicians and surgeons; they take time in their examinations, and go to see these cases in the morning as well as at the hour of visit; they master each case, and keep a careful record of it; they do not try too much at once; they endeavour to know thoroughly what they know at all; they are not afraid to ask questions; and they are very successful in the advance, not only of their knowledge, but of their power to know. There is this difference between them: the elder appears satisfied when he finds a case that corresponds exactly with a book; the younger is always trying to show his brother that the book is wrong. The one is disposed sometimes to fit his facts to the ideas he entertains of what facts ought to be, and to strain them a little, sometimes this way, sometimes that, in order to make the fit complete and creditable; the other is so averse to believe that facts ever do correspond with statements, that he sometimes looks at them through a distorting medium, and imagines that there are exceptions when there are only blank spaces or wrong entries in his own information. The elder sees things that do not exist; the younger as often fails to see those that do. The one is ever trying to verify the wisdom of the past, the other to show that it fails to meet the knowledge of the present; while the former looks somewhat hopelessly at the future of our science, the latter believes that it will witness the solution of every enigma, the unravelling of every tangled skein of truth. The two brothers, while they counteract, yet supplement each other, and help each other onwards in the pursuit of their common end, the acquirement of all that knowledge which, however imperfect it now may be, is yet the best that can at this time be brought to bear upon the sufferings and sorrows of their fellowmen.

The outside phenomena of five groups of cases have now been brought before you; and in order to advance to a knowledge of their pathology, I wish to point out the primary or essential fact in the departure of each from healthy action. This may often be found in the *absence* of some important principle or quality. Look at the *first* example, and see how certain defects disqualify him for the work he professes to have undertaken. He fails to see the greatness of that work. By his presence here it is assumed that he wishes to learn the science and art of Medicine—i. e., to know all that can be known of the most complicated set of phenomena that can be studied by the human mind. He requires patience and untiring energy, but he exhibits neither. He fails to see the value of his time. He cannot hereafter make up for the opportunities he is now daily allowing to escape unimproved. There is a want of consideration—a want of common sense in a man's undertaking a work of great magnitude, and treating it as if it were mere child's play. Lives have been spent by some of the greatest intelligences of our race in acquiring and arranging the knowledge with which he ought to become familiar; and that man's intellect is defective who professes to study Medicine, and who takes no pains to do it. To attend lectures with irregularity, and to saunter lazily through wards filled with patients who might teach him what he professes to want to know, proves, I submit, a want of intelligence in the first case I have described. But, further, there is want of honesty and want of heart. C. V.'s father lives in the country, and leads a laborious life. He is in constant and wearisome attendance upon the sick poor of a large union, or he is hurried from house to house to hear the oft-told tale of suffering and weakness—of miseries made tenfold worse by want. He spends the long hours of a winter's night in some wretched hovel, where the sorrows of a woman, because her hour has come, find *no* turning into joy that a man is born into a world so dark as hers. He has closed the dim eyes of some old labourer whose day of toil is done. The great mysteries of life and death surround him; he stands alone in his struggle with the sorrow and the suffering that beset him on every side; he has no colleague to cheer him in his work, or to help his own wearied brain; all that he does is without the *eclât* of public position, or the reward of fame. His family is large, and his means are small; his wife performs household duties to which some fine servants would object; his daughters have but short school days, and then have to give out to others the little they have learned. It is all hard work in young Vane's home. And why? The father labours that his son may learn: he has placed him here amongst immense advantages; his small savings scarcely meet the hospital and college fees; but yet, while there is stint and toil at home, he saunters lazily about the wards and lecture-rooms, and never lightens, by the effort of one little finger, the great burden, some part of which his broad young shoulders should have now learned to bear. There is want of common honesty in this, and want of heart; and this last he shows quite frightfully sometimes when he makes his visit to our wards. Let him not stare rudely at the patient just come in. Let him, if he will, handle, but handle tenderly, the palsied arm that has done much work when once it was strong as his. Let him not choose the wards for a rendezvous, in which to chat idly with his friends about the boat-race or the billiard match; but let him come with reverence and with uncovered head into the presence of disease or death, and feel that sorrow and suffering demand a respect which it is his honour and duty, as well as his privilege, to pay.

Leaving now the first case, the prognosis of which is by no means good, I wish to analyze the second much more hopeful specimen of student life represented by Superficialis Hurry, whom you will remember we found always in haste, and most ubiquitous in the distribution of himself. Praiseworthy as his energy is, he makes a vast accumulation of material which is of little use to him, by reason of the confusion in which he leaves it. He has seized a fact here and another there, but he has not been able to bind them together. He often so learns

the answers to a number of questions that he is "safe to pass an examination" if he is only fortunate enough to get the proper questions; but there are facts which lie between those questions, and which throw light upon their answers, and these he has hitherto failed to see. The scraps of knowledge he has gathered are to him something like "cut flowers" standing in damp sand, varied and beautiful to look at, even doing something with the life that lingers in them, but is quickly vanishing away; whereas they should be living things, firmly rooted in the earth they spring from; transforming crude into less crude material; raising the lower forms of matter into higher; assimilating much that is heterogeneous, and evolving new products as the result of their own inner life. What D. S. H. fails to perceive is the existence of a deep-seated relation between all the facts that come before him; that they are, as it were, twined together by their roots; that they have a common holding to the earth they spring from, and that he must dig deeply who would learn their meaning; that, underneath the surface phenomena he has scanned so slightly, there are relations, which cannot sometimes be seen or handled, but which may be appreciated by thought, and which must be so appreciated if he would fully comprehend the phenomena he has witnessed. The manifold facts he has to learn and use resemble rather a mighty forest, with trees of an age's growth, whose brawny arms have other work to do than to bear sunwards their own leaves, and thus nourish their own life; for on them the ivy clings and plays its part, and their bark is stained by the busy lichen, or is fringed by moss; while under their shade, and protected by their care, flowers of a thousand hues give forth their scent, for a few hours wave their fragile petals in the air, finish the work that is given them to do, and then pass away: where life in all its forms is moving with restless energy, and moving towards the accomplishment of one great end; where the roar of the beast of the forest not only does his bidding, but, as it shakes the dew-drops from the gossamer, drowns a whole colony in that tiny flood, and so feeds the dawning life we fail to see; where the insect in its search for food scatters the pollen from the anther, and thus helps to renew the form it lived upon; where life in its thousand forms finds its great bonds of union and transformation in the earth and air; the roots deep down in earth seeking and finding in the darkness, amid crumbled rocks and the ruins of past forest life, the very elements they need; the earth drinking in the rain that, as it falls through air, brings back again those seen and unseen fruits of their toil that the great live world above has filled it with; and over all the sky, with its marvellous, mysterious agency of light and heat, returning to all living things the powers that first called them forth or roused them to their toil. In Nature there is a wondrous unity of advancing purpose amid a vast circle of events; no link can be dropped from her mighty chain; nothing can be added thereto, nothing taken away. She is before us for patient and reverent investigation, and he will never learn "her secret meaning in her deeds" who is content with a hasty glance at the first facts that come to hand. No, he must trace each fact into its past and future; he must see how it came where it is, how it lives, and how it grows. He must follow the teaching which Nature herself is ever ready to afford, that nothing is small, that nothing stands alone, that in darkness and "in silence mighty things are wrought," and that what we see is but the outcome of still greater things and forces as yet unseen. He must, then, work widely and work hard, but he must work deeply too, and in so doing his progress must be slow. He may, and will, find his knowledge less showy, but more real; it may even be thought less of by some around him, but it will be of far higher value to himself.

There is a caution, with regard to clinical study especially, which I would give to all who are in any degree affected with the malady of Hurry. It is, that they should never allow themselves to sacrifice accuracy and thoroughness of information at the shrine of definiteness. There is something very charming, very easy to remember, in broad lines of distinction, and such lines are often highly useful; but they rarely go down to the bottom of a matter, and are often on the barest surface only. It may be enough, in order to enable you to distinguish between two particular individuals, to say that one wears a violent Albert-chain and the other a broad-brimmed hat; but such characteristics do not by any means exhaust the differences between a dandy and a quaker; and if they were taken to do so, your generalization might be broken to pieces by the experience of to-morrow. There are diseases which may sometimes be distinguished from others by the presence of one symptom: value it, but value it correctly; and remember that, in every case, you have a whole body for your study. And do not rest satisfied with applying some little fragments of your science to the mere fragments of a case; but bring all your knowledge to the interpretation of every case, and depend upon it you will not often find that you have one grain too much.

Now, let us see wherein it is that our *third*, painstaking student—our devotee of chemistry—is at fault. He has worked well at his favourite study; he has partially, but not utterly, neglected other portions of the full curriculum of education. Unlike D. S. H., he recognises the importance of digging deeply in his work; but, practically, this deep digging is carried out only around his own favoured plant. He will examine its tiniest root-radicles, and the bristles upon its most distant leaves. He knows all its aspects, and has recorded with praiseworthy care every detail of its growth and change. But of other plants he knows but little; and he feels almost an approximation to contempt for those who do not move along the line that he has chosen. He recognises the marvellous interdependence of all Nature's works, and the analogous relation between all branches of science. He sees that "physical" science, to be complete, must embrace those properties of matter which have to do with the "proportion" in which one kind of substance combines with another; that the idea which we form of an "elementary body" is based upon the possession by that body of a certain group of physical qualities differing from those which are presented by another; and thus that physics and chemistry are not distinct sciences, but parts of one comprehensive view of the substances by which we are surrounded. Further, he sees that, in order to understand all these properties of matter, he must trace out their behaviour, not only in the so-called inorganic, but in the organic world; and that a full natural history of any element cannot be said to be written until its presence and effects are known in both the vegetable and animal kingdoms; and yet further, that the knowledge of these must embrace not only the processes of health and growth, but those of disease and decay. Thus he is right in holding that all our science is but one great science; and that the lines which we have found it convenient to draw between this branch and that of the great sum of knowledge, are always artificial, and often wrong; that all systems of classification—whether so-called "natural" or not—are but human systems, tinged by error and dwarfed by ignorance; that the only really natural distinctions are those which Nature herself presents—viz., the distinction of individual from individual, and of element from element; but that we are as yet by no means certain that we have absolutely accurate tests for the recognition even of these, as it were, final or primary distinctions. In perceiving them, however, we come face to face with Truth. When we attempt to advance further, all that we do is to gain glimpses of a mighty order that we fail to grasp: the arrangements we adopt follow the leadings of our own but partially instructed minds; and, in all the statements that we can frame about them, we of necessity introduce the elements of incomplete observation and of imperfect thought. But what C. P. fails to appreciate duly is the greatness and many-sidedness of Nature's works, and also the present imperfection of our means for knowing them. True, an absolutely perfect science of Chemistry must embrace all knowledge; an absolutely perfect Physiology must do the same. But we are far from having attained to these, and cannot reach our goal by starting from one point and advancing through one avenue alone. Dealing with so complicated a phenomenon as Life, we must approach it from many points: we must start from the side of "Physics," and also from that of "Chemistry;" we must advance also from those as yet unreduced "Vital" processes, and again from those of our own "Consciousness" and from the facts of "History." We cannot yet see the point in which all these converging lines may meet; but in the meantime, believing that they do meet, we must work and travel, not on one line alone, but upon each and all, and so approximate the knowledge we may even at the last fail fully to possess. Work then, as deeply as you can, but look around you also. Do not neglect a fact because it stands, as it would seem, apart, or because it is of some order that differs from your own favourite study; do not think it worthless because you cannot verify it in one particular way, but learn to verify it in another: gain all the knowledge that you can from all sources, and bring it all to the interpretation of any phenomenon or process that you are endeavouring to understand. There are many life-processes that cannot be estimated by the thermometer or the scales; and they have a value of their own. The manner of respiration will often teach you more than the number of inspirations in a minute; the quality of a pulse will often give you more insight into a case than will its frequency; an expression of countenance will, not rarely, teach you more than a chemical examination of secretions.

The last cases (the *fourth* and *fifth*) which I brought before you were those in which time and labour were well spent, and would inevitably bring their reward. Before they commenced medical study the two brothers Goodman knew something of physical and mental science. Preliminary education cannot well have its advantages exaggerated, but I am far from thinking that feats of mental gymnastics in respect of classic lore have any direct influence on the success of a student of medicine. He must be "in good condition" mentally; and no man gets into that good condition without some "training." A part of this training is the study of the languages and literature of the past; but for its immediate influence upon his scientific career, it is of more importance that the student should be familiar with modern languages, and especially with French and German. It is, however, of essential importance that he should be well versed in the physical sciences. No man can make much of anatomy, chemistry, or physiology, unless he knows something definitely and scientifically of the great laws of matter. The fact of having studied these, of having learned the mode in which they are to be investigated, and the nature of the processes by which hypotheses are to be verified or refuted, will place him on vantage-ground in his studies here. He will understand what is the value of a "fact," what is the nature of a "law," and what is necessary in order to regard the one as proved, the other as established. And almost inseparable from a knowledge of physical science is an acquaintance with the nature and order of those processes of mind which are common to all kinds of philosophical investigation, which the child or the savage may apply with instinctive correctness, but which the man of science will use but ineffectively unless he has arranged and analyzed them. I do not think that the medical student will be any the better qualified for his work by having his brain filled with metaphysical questionings or ontological speculations; but I am quite sure that a systematically arranged knowledge of the greater and simpler laws of reasoning and of thought will enable him to appreciate much more readily than he could without such knowledge the wide range of phenomena which will come before him here. Thus armed and fortified, the two brothers commenced their attendance upon lectures in this College; and they made, in the manner I described, appropriate use of those great advantages. I cannot but regard them as such, although some in the present day speak of lectures as though they were remnants of an antique species of torture, fit only for exhibition in the Tower of London, with waxwork models of our learned professors, as specimens of a crude state of education now happily extinct. But I think that the lecture has powers for good which nothing yet devised can supplant. The book brings the whole mass of information before you at once; the lecturer gives you day by day the proportion you may take in and assimilate. The book is a dead thing—a moveless, emotionless conglomeration of words, which you may stare at and try to comprehend, but which cannot see or feel your difficulty, cannot change its phrases, and cannot fill up those gaps in your knowledge which prevent your appreciation of its meaning. In the teacher you come in contact with a living man, who sees whether you do or do not comprehend his teaching; who can use simpler forms of speech, and by some trifling change of words make quite clear to you what before was dark as night; who can see where the links are missing in your chain of thought, and can supply them; and who can thus fit you for the work of self-teaching, which, to those who have learned something, is the most valuable of all.

The two brothers I have described, though agreeing in their earnest and successful work, differ in scientific method. The elder tests "observation" by "authority," and finds it wrong; the younger weighs "statements" against "facts," and finds them wanting. The one regards with all his affection, and seeks for with all his energy, the establishment of the uniformity of Nature's processes; the other as earnestly endeavours in those processes to discover, advance, or progress. What the scientific worker really needs is an appreciation and combination of the two; for in nature they are both present, and we may and do observe them both. Look at individual life, and see that some great processes go on in the same way from hour to hour, from year to year. There is the alternate diastole and systole of heart; the constant play of inspiration and expiration, with their effects on air, and blood, and tissue; there is the daily change from sleep to waking, from activity to rest; there is the daily disintegration of tissue, the excretion of waste material, and also the daily assumption and assimilation of fresh supplies. Further, there are recurrences, with wondrous order, of some physical changes—partly those of health, partly those of disease—at still longer, but yet time-ordered periods, and the seasons of this year have effects like to those of the years that have gone before. But, with all this order, and as the result of this order, there is progress: the infant grows into the child, the child into the youth, the youth into the man. The changes of dentition and of puberty lead onwards to the full growth of the adult; and then, in its due time, decay comes surely on. Some diseases may appear, go through their well-known phases, observe periods that we can with certainty predict; but they have not been in that individual before, and they will not visit him again: they have done their work. All that he has passed through makes him what he now is; there has been recurrence and order, but also growth that does not return into itself. Yet look further, and see that this growth has its order also: lose the individual in the many, and then see that those things which occur in him but once, which even constitute his separate life, do recur, but recur in others; and so again we see the circle, but a wider one. But is there no progress of this larger group? Look at families, at races, at nations, and you may see that they, too, have their periods of infancy, of youthful follies, of angry passions, of wise discretion, of luxurious ease, of creeping feebleness, and dusty death; and while the one nation, with its one life, sinks away, another takes its place, and the great world is ever young. But the great world also grows, and—

> "I doubt not through the ages one increasing purpose runs,
> And the thoughts of men are widened by the process of the suns."

Look at our sciences from another point of view. See how in that of physiology, in its largest aspects, we observe an onward progress amidst the orderly recurrence of events. Not merely individuals but species become extinct; new species take their empty places, and lower give way to higher forms of life. Whatever may be the theory for its explanation, there can be no doubt about the fact, that the life upon the world at this present moment has not the form it had; seeming uniformity of process has wrought out change, and that change is one of progress or advance. We do not exhaust the question of how this is, we only move it a few steps further backwards, if we admit the principle as readily as we see the facts of so-called "natural selection." Go back to the simpler types of life: imagine, if you will, that all the variety that now clothes the world has sprung from one common form; you must then admit that there was in it the possibility of divergence from the type, or, in other words, that it contained within itself the germ of all subsequent developments; and thus, in the only conception we can frame of primeval life, we see in its apparently simpler but really more complex order the mainspring of advance. We observe the same combination if we regard at an early period of its development the now living individual or species. It is easy enough to trace life backwards until we fail to see the differences that lie hidden in some fœtal form, common to all kinds of fowl, to the donkey and the dog, to the monkey and the man. But do not let us suppose that differences, though hidden, do not exist. We may not be able to distinguish the one ovum from the other, and yet the difference between them is so great that one becomes the peacock, and the other the Cochin-China hen; the one a Skye terrier, and the other a learned Doctor of the Law. It is when brought face to face with facts like these that human science, grateful for what it is, should not trumpet forth generalizations to which it has leaped to conceal its weakness, but should show its real strength in humbling itself before great truths that are as yet past its finding out.

Again, in the yet infant science of geology we may observe the same combination. We argue upon the supposition that the processes of past times were like those of to-day; we believe in the constancy of the operation of Nature's laws. But yet the result of all this is that the world's face has changed, and is changing still; that while the earth lasts, although heat and cold, summer and winter, never fail, they never fail to do their work, and that that work does not, so far as we can see, return into itself, but carries out some mighty plan, the mere alphabet of which we have as yet been able to learn.

Notice once more how both order and progress may be seen combined in the history of scientific systems and of philosophic method. Their movement is onward, but it often appears to return into itself; yet it does not thus return. It is not a circle that is described, but rather, as it has been said, a widening and ascending spiral, whose ultimate course we cannot now compute.

Lastly, see how in human life the one kind of law, by its constant and orderly operation, develops results of another and a higher kind. See how the physical forces are often determined in the direction of their action by the chemical consti-

tution of the bodies in which they are displayed; how chemical actions are co ordinated to produce results which cannot be expressed by chemistry alone, but require another set of terms, which we denominate the vital; how animal life is determined by mental conditions; how the latter often yield to social and moral obligations; and how marvellously they are all intertwined to produce that complex creation—a living man! How long the apparent conflict of these two elements will last in science we cannot tell. Where is their common point we cannot see; but as the circles of order widen they lose their apparent recurrence, and order and progress become, even in our own minds, one. The infinite circle is identical with the straight line infinitely produced. Our definitions fail, or contradict themselves, when we endeavour to carry them thus far; but we feel confident that there is no contradiction in the things themselves, and our finite minds can feel assured of the existence of some great facts that they have as yet failed to grasp, and may be convinced of the reality of an infinite, abiding, and eternal Truth, in which all truths shall centre; in which is no error—no darkness at all, but which can now be only dimly seen or felt after amid the changing and passing shadows of Time.

In entering upon our profession, then, you must take high views of its vast demands as a science, and of its claims, not only upon your mental, but upon your moral nature. Avoiding carefully the errors I first described, see to it that you have untiring industry, but that your work is deep as well as broad. Strive to learn the inner, often-hidden relations of all branches of your knowledge, but remember that much is yet hidden, and that, therefore, you must approach truth from many sides. And, lastly, in your earnest work to know the laws of life, and in your hereafter daily contact with life,—at its beginning, in its troubles, and at its close,—do not, in recognising the divinely-appointed order of all events, lose sight of that great divine plan of progress which will surely evolve the highest good out of much that now seems deepest evil. You will thus often see a moral purpose in the suffering you try—but try vainly—to assuage; a good in the death you feebly struggle to postpone. Regarding disease as fraught with meaning and purpose other and higher than the mere change of organ you can see and handle and record in your pathological note-book; looking on death as the fulfilling of some greater end than can be represented in the Registrar-General's Returns; though often saddened, often baffled in your unequal conflict with those two great foes, you may see that they also have a work to do, perhaps more friendly than your own; and thus you will be led to feel, and that with a conviction no other profession could urge so strongly upon you, that though

> "Suffering is permanent, obscure, and dark,
> And has the nature of Infinity,
> Yet through that darkness (infinite though it seem
> And irremovable) gracious openings lie,
> By which the soul—with patient steps of thought,
> Now toiling, waited now on wings of prayer—
> May pass in hope, and though from mortal bonds
> Yet undelivered, rise with sure ascent
> Even to the fountain-head of peace divine."

Abstracts

OF THE

INTRODUCTORY LECTURES

DELIVERED AT THE

VARIOUS MEDICAL SCHOOLS OF LONDON

AT THE

Opening of the Session 1863-64.

CHARING-CROSS HOSPITAL.

MR. C. W. HEATON'S INTRODUCTORY ADDRESS.

THE lecturer commenced by remarking that there were many things which did not belong to any of the prescribed courses of study, which it was yet highly desirable for medical students to hear at the commencement of their education. The 1st of October was a day which formed an epoch in the career of all medical men—one of those days which divides into two the brief span of our lives. The oldest and wisest felt it to be so, and so quite equally must those upon whom its sun had not yet set. In future years the students would look back to this day either with pride, as the day which opened to them that career which had brought them their comfort, independence, and the grateful love and respect of their fellow-men; or with bitter shame, as they thought of wasted opportunities and misspent time. The lecturer remarked that the speaker on these occasions was usually a medical man of high standing in his profession. It was to such a one that the office most naturally belonged, for who could so well speak of the objects, hopes, and difficulties of a medical man's life as one who had known them all, had fought through early trouble, and had arrived safely at the goal? The lecturer felt acutely that he had not this advantage; he was not a member of their profession, and must not presume to speak of the technical details of a medical man's life. But this very deprivation enabled him to speak more freely than he could otherwise have done of the deep and universal respect with which the members of the profession were regarded by mankind. And well indeed was that respect earned. Apart from religion and its ministers, where could be found so noble a mission, and so faithful a discharge of it?

Medical practitioners had good reason to pride themselves as they did on the unselfishness of their profession. It was a rare thing to find a doctor in whom the thought of saving life and lessening human pain was not paramount to all other considerations—even to that of fees. The errand of mercy, the earnest endeavour, was not limited or measured by those fees, but, like God's rain, descended alike on the just and on the unjust, on the rich and on the poor. Mr. Heaton hoped and believed that this high character of the profession would never be lost in his hearers' hands; but that in building up their fortunes the foundation stones would be their duty towards God and their duty towards their neighbour.

The students must not disguise from themselves at starting, that their education would be a most difficult, complicated, and comprehensive one. Apart from technical knowledge, there were many things which no teaching and no reading could give, but which could only be acquired by patient study and self-restraint. They must be quick to read men's characters—must study their mental as well as their physical infirmities; they must be prepared to humour their weaknesses, to keep their secrets, and to soften their fears. They would have to warn the sufferer of the near approach of death, and, as far as in them lay, to comfort the fatherless and widows in their affliction. The lecturer quoted an eloquent passage from Thackeray's "Pendennis," in which the solemnity of a medical man's trust, and the intense anxiety with which his visit and his words are looked for, are strongly exhibited. Speaking of the unselfishness of medical men naturally led Mr. Heaton to condole with all his hearers in the recent death of the lamented Dr. Golding, who, as he reminded them, had been the promoter, and for thirty years the mainstay, of Charing-cross Hospital; for the whole of that time, in spite of numerous difficulties and constantly increasing ill-health, he had toiled on with his good work. Could he have had on earth a nobler reward than the thought that more than 350,000 human beings had had cause to bless his name?

In attempting to advise them as to their general conduct, the lecturer's task would be a simple one. A complete alteration had taken place in the medical student within the last few years. And it was, indeed, scarcely possible to trace in the quiet and gentlemanly student of the present day any of those peculiarities which Charles Dickens and Albert Smith had made immortal. Those eminent naturalists had described him as a kind of wild animal. His hands were dirty and gloveless. A large stick protruded from his pocket. He had a contempt for clean linen, and an utter freedom from all trace of collar! He breakfasted on raw brandy and full-flavoured cubas. He carved his name in the pew in church, and made night hideous with his songs. All this had gone by—all medical students would reckon a man who did such things as a blackguard. And, indeed, we could hardly believe that some of those grave, well-conducted gentlemen who now alight from neat broughams at our doors, may have belonged in early life to such a wild harum scarum family. Much of this improvement was due no doubt to the higher education now expected in a medical man. It was now almost a matter of necessity that a medical man should be a gentleman, because the educational tests to which he was submitted could only be passed by those who had the education of gentlemen to fall back upon. All students of the present day must rejoice at the change, although it would debar them from the graceful pleasure of wrenching off door-knockers, and other similar pastimes. On the other hand, there were plenty of good healthy amusements which, so far from hindering the

student, would enable him to work the harder. A good pull on the river, a ten-mile walk, or a stiffly contested game at cricket would send any man home to his work with braced fibres and cleared brain. The lecturer regretted to hear that the hospital cricket club had not hitherto been very successful, and hoped that a new and cricket-loving generation might arise and that they might hereafter be equally celebrated for the success of students in examinations and for the long scores they made at cricket. Turning to more important subjects, the students must remember that the one point upon which the whole of their future careers would depend was diligence. It was a hard, though a most essential lesson to learn. The continued attention to lectures was very monotonous, and the temptation to allow the thoughts to stray was very great; but if the habit was once acquired, how valuable it would be! Everything which it was necessary for them to learn would be brought in succession before them, and, with trifling exceptions, nothing which was unnecessary. They must acquire the knowledge somehow, and if they followed all the lectures rigidly, and did not allow a single point to glide by them unperceived, their knowledge would grow up gradually and in a most firm and satisfactory manner. There were certain necessary drawbacks to all teaching by lectures. The first of them was the rapid succession of lectures on different subjects in one day. Students had complained that they had to rush from anatomy to chemistry at such a rate that the result was perhaps a curious jumble of metacarpal bones and sulphuric acid. This, of course, could not be helped, but habit would do a great deal in getting over the difficulty. The other inconvenience was generally in the student's power to avoid. In a course of lectures there could generally be no repetition, and hence it often happened that when a student missed a lecture he missed a key to a good deal of what followed, and many subsequent lectures became in consequence unintelligible to him. When the missing of a lecture was a rare thing, this might be remedied imperfectly by the student carefully and immediately reading-up the subject in his handbook; but how often was even this neglected!

This might be defined to be the best way of studying:—Let the student attend at and to the lectures regularly. Let him, if possible, take notes; this, however, was to some men a matter of difficulty. And let him never neglect to read-up in his handbook the subjects he had heard in the lecture. The student might, if he pleased, adopt a different and far inferior system. He might set at naught the prescribed divisions of study, and, taking up vigorously with some one subject, might for a time neglect all others. Then he might discard his first love, and take to something else. The result of this system generally was, that by working harder than he need have done on a good system, he might succeed in getting a vague smattering of each subject, in the place of the clear and satisfactory knowledge which he might have had. There was yet another plan: The student might set himself to work to learn nothing, and in that case he would probably be successful. He might shirk his lectures, waste his time when at them, and devise a thousand other means of preventing a ray of reason from penetrating the solid darkness of his soul. These floating logs must drift on in their own way, and would no doubt arrive safely, some day or other, at the great sea of mediocrity. They always went to a "grinder," and frequently succeeded ultimately in passing their examinations.

Mr. Heaton next proceeded to speak of the course of scientific study which was to occupy the greater part of the first year of the student's education. He remarked that it embraced anatomy, physiology, chemistry, botany, the laws of heat and electricity, and some other branches of physics, and materia medica. With the exception of the last, which might be regarded rather as an art than a science, those things constituted important branches of physical science. Now although science was only to be regarded primarily as a means to an end, although it was but one step towards the power of striving successfully against disease, yet it was in itself so great and noble a thing that every thoughtful man should be thankful for the opportunity which forced him to make it in some measure his own. Physical science, in the sense in which we now use the term, may be almost said to have had its birth within the last few centuries; and its rapid progress since must ever stand as one of the most remarkable events in the history of man. How much of all modern progress may be traced to its influence! how closely are all our ideas interwoven with the truths it has taught! In what other province of the human intellect can we boast of anything like the progress it has made? We have no better historians than Thucydides and Tacitus—no poet better than Homer, Dante, and Shakspeare; and Socrates, Plato, and Francis Bacon are not yet quite eclipsed as thinkers. In all of these things progress is wellnigh impossible. No man can take up his ground where his predecessor has left it. The poet cannot master Shakspeare and straightway proceed to mount from that pinnacle to loftier heights; he must take his stand, like all others, at the bottom of the mountain, if haply in his life-long effort he can attain to within a sight of the giant peaks above. But in science it is all progress. The individual is nothing. The great mother Nature is all in all. One by one her votaries toil on, each contributing his petty inch or two to the constant advance, and each dying in his turn, only to give place to others, who spring Phœnix-like from his ashes. Who will dare to say where the mighty movement shall stop? If the study of science were pursued simply for utility and temporary convenience, it would, like other branches of study, be found dull and stupid. But if the student threw himself into it, and observed carefully the beauty and interest of what he was learning, he would not fail to find that he derived ever-increasing pleasure and satisfaction from it. More than this might be hoped for. Every young medical man should be in some way or other a scientific worker. Everyone who had studied an art or a science felt the desire to do something for its advancement; and what was to prevent this desire from being converted into action? It was a good thing to have a favourite pursuit, when it was a good one; and no man was ever more thoroughly happy than when indulging in it. Then in the early part of a medical man's life it often happened that there was a good deal of time to spare. That interval, before the busy whirl of practice had commenced, was just the time for science. The student should then take down his big books, pull out his microscope, and set to work. The next few years of his life would pass quickly, happily, and profitably. If he did not join the body of those who have advanced the cause of science, he would at any rate find that he had advanced his own mind. A perfect bond of union between all the sciences would be perceived as the student advanced. All sciences were but so many manifestations of the regular and harmonious workings of nature, and yet in all there was a certain grand simplicity and uniformity of design. Certain constantly recurring facts there were in which nature appeared never to vary; and these, although we knew nothing of their cause, we distinguished as the "laws of nature." These laws should not be considered in the light of causes. Of causes apart from the First Great Cause we knew nothing. We did not "explain" anything by talking of the "law of cohesion" as determining the solidity of a lump of chalk. All we could do was reverently to trace the finger of God in the world He had made. We could then admire, as proofs of His love, the wonderful order and harmony which pervade that world. These laws of nature were found to govern all sciences alike. Having studied chemical action, it was found that the assimilation of food by the plant, the formation of starch, sugar, and woody fibre, and of various acids and alkaloids, were all examples of it; and the same thing was true of geology, and even of astronomy, where chemical survey could hardly have been supposed to extend. But this influence of various sciences upon one was most clearly seen in physiology. The structure of the body was in accordance with the laws of mechanics: the eye was an optical and the ear an acoustical instrument; the fluids passed the membranes in obedience to the laws of diffusion and digestion; nutrition and respiration were, however imperfectly understood, true chemical processes. It was indeed a difficult, although very interesting, branch of science; and yet, if some of the more enterprising of medical students would but prepare themselves for the task, there would not be wanting many highly competent workers. In the opinion of the lecturer, the greatest advance was to be hoped for by the careful study of chemistry in its relation to physiology. In spite of all the claims of science, the students must not forget that their great object was to become good doctors, not merely scientific men. A great distinction was to be drawn between the science of pathology and the art of healing. The former was yet in its infancy; the latter had attained to a most stately growth. Our wisest medical men were constrained to admit that of the causes of disease and the nature of the action of the various medicines in use they knew as yet but very little. Those causes were so infinitely various, complicated, and obscure, and the effects of the same treatment were subject to so many exceptions and anomalies, that it often happened that even the wisest could not predict the results of the system he was employing. Some, but very little, progress had been made in deciphering the various problems of pathology, but we ought not to despair of further advance. With greater knowledge of

physiology, and increased means of carrying on researches, more light would surely come. One great instance of the advantage which modern science had conferred upon medical practice was to be found in the increased attention now paid to the two essential conditions of life—air and water. The knowledge that air abnormally loaded with carbonic acid was injurious to life had produced greater attention to ventilation, and similar knowledge had caused drainage to be regarded as a *sine qud non*. The knowledge of how much the salubrity of water depended on the amount of organic matter it contained had taught the doctor to look to the analysis of the water in his district as an indication of the amount of epidemic disease which he would be likely to meet with. This improvement was constantly progressing. We could no longer look, as Pope did,

> "To where Fleet ditch, with disemboging streams,
> Rolls the large tribute of dead dogs to Thames."

The Thames itself was being purified; and optimists told us that the time was coming when the stranger would come from afar to London-bridge to slake his thirst with the clear, pellucid waters of the ancient river!

The great guide of all medical men was experience: not that the precedent was to be regarded as a sure, unerring guide; on the contrary, the opinion of a medical man of genius was a composite thing, formed on a thousand small points, which yet conduced, in an important degree, to a correct judgment upon the case. The conduct of a difficult case by a first-rate medical practitioner had, indeed, something in it almost poetical. As he watched it from day to day, noting every little thing which might tell for or against him, by a power that seemed like intuition his opinion slowly grew up, he himself, perhaps, hardly knowing how. And then, when the time for action had at length come, the decisive operation was performed with unflinching heart, and quiet, steady hand; the knife, as though instinct with the strong nerves of the operator, doing just what was desired, and no more. A too rigid adherence to precedent still characterized some of the members of the profession. It was, perhaps, a safer error than the reckless love of hypothesis and unbased theory which guided others. The mean was well expressed by Tennyson:

> "Not clinging to some ancient saw,
> Not mastered by some modern term,
> Not swift, not slow to change, but firm,
> And in its season bring the law."

The lecturer then dwelt on the mysterious connexion existing between the body and mind, and the important questions to medical men which spring from its consideration. The consciousness seemed to be for the present bound up with the frail tenement of flesh; and the cessation of the peculiar chemical and physical actions which constituted animal life appeared to involve the arrest of the operations of the mind. The real knowledge which could be gleaned on this interesting subject was confined to certain practical guides to conduct deduced from its careful study. Some of the great unsettled problems of the day, such as the obscure question of moral accountability, were affected by these psychological studies.

Mr. Heaton concluded by assuring the students that their future success and happiness would ever be cordially welcomed by their teachers, and by hoping that in their future lives they would always have good cause to look back with pleasure on the period they had spent at Charing-cross Hospital.

ST. GEORGE'S HOSPITAL.

MR. HENRY LEE'S INTRODUCTORY ADDRESS.

"ARRIVED," the lecturer said, "for the first time in this great metropolis, some of you, gentlemen, are about to enter upon the study of the profession of your choice, and to begin the real business of your lives; and it is right that you should be welcomed at the outset with some words of encouragement and advice; for if I may rightly interpret your feelings by what I recollect of my own under similar circumstances, you may ere long require every assistance that can be afforded to you in this way. One of the first impressions that a student receives on his arrival in this city, with its teeming population, is, that everyone except himself appears to have some fixed and definite occupation, in the pursuit of which he is busily engaged. A feeling of isolation creeps over his mind as he sees on every side men intent upon interesting and absorbing engagements, in which as yet he can take no part; but he believes that as soon as he can commence his studies this feeling of loneliness will be relieved; he believes that in the hospital he will see, and at once be able to recognise, many different diseases, for each one of which there is an appropriate remedy, which, if he cannot himself apply, he will at least have the satisfaction of seeing applied by others. He goes, perhaps, into a ward, but the same feeling of isolation follows him: he cannot recognise the diseases which he expected there to find, and he is disappointed at not being able to trace the actions of medicines. He is told that his education must not begin here, but in dissection and in the lecture-room. Accordingly, with full purpose of obtaining an insight into the as yet hidden mysteries of the profession, he goes to the Anatomical School. There he hears a strange language—a language far too fluently spoken to be readily understood. He will hear of eight bones in the head, of fourteen in the face, of twenty-four in the spine, of twenty-six in the chest, of four in the hips, of sixty-four in the upper extremities, and of sixty in the lower, besides some smaller bones not here enumerated. Each of these, the student will be told, has its processes, its surfaces, its extremities, each with its different aspects, and each to furnish attachments to different tendons. These bones have to be clothed with muscles of a great variety of form, and with many different uses. The muscles have in their turn to be supplied with bloodvessels, nerves, and absorbents, with all of which the student is expected to become acquainted. The large cavities in the body are filled with parts, also with their full complement of bloodvessels, nerves, and absorbents, each one of which affords a separate study. Many days will thus pass before his ear becomes at all accustomed to the language in which he is to follow his studies, and he will find that anatomy is one branch only of what he will be called upon to learn. There remain comparative and morbid anatomy, physiology and pathology, chemistry, general and pharmaceutical, and materia medica; surgery, theoretical, clinical, operative, and ophthalmic; medicine, theoretical, clinical, obstetrical, and forensical; with the use of the ophthalmoscope, the stethoscope, and the laryngoscope. In general science he will be expected to learn something of mathematics and metaphysics, mechanics and optics; of hydraulics and pneumatics; of mineralogy, botany, zoology, and geology. In literature, besides Latin and Greek, he will be told that he should know at least French, Italian, and German. A thoughtful and earnest student, a friend of my own, when he heard his first introductory lecture, felt, as he has expressed it, overwhelmed; a feeling of blank despair hovered over his mind, and he experienced a terrible sense of mental paralysis—a kind of waking nightmare, which drove him to exclaim, 'There is no hope; it cannot be done.'

"Having myself experienced something of this feeling, I am here, gentlemen, to reassure you upon the point, and to shew you that what is required, as far as medical education is concerned, may not only be easily but pleasantly performed. If you sit down and try to learn all the facts of any one of the sciences which I have enumerated separately, you will have indeed a difficult task. If, for instance, in the science of botany, with its fifty thousand known species of plants, you attempt to store up in your minds all the different isolated facts which may be presented to you, the period of your education will be gone before you have fairly commenced your task. Or if, again, in anatomy you learn by heart, as it is termed, the answers to the ordinary questions that are asked, you may indeed become sufficiently expert even to pass an examination; but if you should have the misfortune to learn only in this way, and after the lapse of a few weeks only from the period of your examination will reflect upon what you really know, you will find it amount to very little indeed. A fellow-student of my own at one time, I believe, could repeat by heart almost any portion of a book with which you will perhaps soon be well acquainted—namely, the Dublin Dissector. Yet I doubt whether he ever had any real insight into the functions and uses of any part of the living body. At all events, he has not as yet made any practical use of his knowledge. I wish to advise you to begin and to continue your medical education in an entirely different way. I wish you to see in the simplest daily observation which you may make the illustration of some principle which will connect it in your minds by a common link with all other facts of a like nature. As soon as in the physical sciences you learn in this way one such fact, you at the same time learn something about a vast number of other things which all come under the same law. Thus if you once realize the fact that any one chemical combination takes place in definite proportions, the knowledge which you would have thus obtained, instead of being an isolated truth, would be the illustration of a principle or a law

which would apply under certain modifications to all other chemical combinations of the same ingredients. Or, again, if any one of you were to watch attentively, and day by day, the changes which take place in the common egg, exposed to the same temperature as that to which it would naturally be subjected, you would have learned something about the development of every kind of bird in existence, and you would know, further, something about the original mode of formation of every kind of animal.

"The same general principles, the same recognition of general laws, will assist us in our studies of the vegetable world. Here, as in the other branches of knowledge, instead of learning separately and in detail every individual fact, the laws or principles may be grasped which regulate the growth, the development, and the decay of each different kind. A kernel is planted in the ground, and by means of the vital power within it a peach-tree is in time produced: another kernel is planted, and a nectarine-tree, by a similar power, is developed. From the almost invariable way in which these results follow, we are apt to think of them as the indications of separate forces inherent in the different seeds. But by-and-by a case will occur in which the fruit produced will present on the one side the characters of a nectarine, and on the other those of a peach. This exception to the general rule will at once enable us to see that it is the same power, modified by some peculiar circumstance, which produces both the nectarine and the peach. This power does not reside exclusively in any tree or set of trees, although it brings them under its influence and control; and it would probably have existed in nature even if no peach or nectarine trees had hitherto been formed.

"Allow me to give you another and a somewhat more complicated illustration of the way in which these general laws, powers, or principles pervade every part of the visible world as exposed to our investigation and interpretation. It is an observation commonly enough made that the human body may be called a microcosm, as if it did not differ from the universal system of nature so much in the symmetry and number of its parts as in its size. In the human body the powers that move the limbs had been investigated year after year, and these powers were thought to be sufficiently explained when the nerves were traced from the spinal cord to the different voluntary muscles of the body. The moving power was here recognised and the law established, that whenever a nerve was affected either by mechanical irritation or by an impulse of the will, the muscles to which it is distributed were immediately thrown into action. But it was subsequently found that something more than this was necessary in order that the muscles should perform their proper functions; for cases occurred in which patients lost sensation of a great part of the body, and it was then perceived that the muscles acted indeed, but it was irregularly and without any combined motions. For this amongst other reasons it became evident that the muscles must not only be endued with the power of acting, but be regulated in those actions, and hence arose the idea that in every part there must be nerves of sensation as well as nerves of motion. A great principle was here developed and experimentally demonstrated by our own countryman, Sir Charles Bell, and other physiologists since his time. The muscular sense was recognised and added to the other senses which were previously known. By it we are conscious of the amount of effort made in endeavouring to raise a weight, although we may not move it. This sense it is which gives us the knowledge of the exact amount of power required in different muscles in order that they may concur in producing the various motions of the body. If this sense were impaired or ceased to act in conjunction with the will, the muscles would act irregularly, imperfectly, or not at all. The governing power would be gone; and as in a community, so in an individual system, the different members would have no combined action, no co-operation. But even after so much had been done by Bell, Magendie, and Mayo, the idea, the principle, the law, was not seized in its fulness. It soon became evident to reflecting minds that this sense, supposed to reside in the different muscles, was not sufficient to account for the regulation and adaptation of some of the most beautifully contrived motions in the body. The muscles of the eye, for instance, have not, or possess in a very imperfect degree, a muscular sense in conjunction with the will, and they are therefore in some respects analogous in their physiological relations to the so-called involuntary muscles of the body. When the eyes are closed, we know not in what direction they look, unless we feel the prominent cornea beneath the lids. We should in vain require a blind man to fix his eyes on any given spot, and the reason why he cannot do so is evidently that the sense which governs the muscles of the eye is absent. The peculiar offices of the muscles of the eye in directing it and adapting it to vision require that its actions should be regulated, not by that sense which controls ordinary voluntary actions, but by the sense of sight. A local plan of governing the movements of the eye is adopted, which does not depend upon, and is in very imperfect communication with, the general sensorium. But these facts admitted, and after all the brilliant labours of Bell, of Magendie, and of Mayo, in the early part of the present century, the mechanism for regulation of muscular action was known in as far as it related to the voluntary muscles only—those muscles, I mean, which act in concert with the will, or are guided and controlled by our ordinary sensations and feelings.

"But there remain in this little world of ours a vast number of actions of which the central governing power takes no cognizance. Many functions are performed quite independent of our wills, or even of our consciousness. Many secretions have to be elaborated in the various parts of the body, and transmitted to their appropriate destination. The blood has to be propelled in a continuous circle throughout the frame; and how completely the combination of forces which for seventy or eighty years in succession can produce the desired effect with unerring certainty—how completely, that is, independently of our ordinary sensations—is proved by the great fact that this wonderful circulation had gone on in every human being from the commencement of the world, without its ever being suspected, until it was demonstrated by our immortal countryman, Harvey. As the fact of the circulation of the blood was unknown, it is no wonder that the mechanism through which that circulation was controlled and regulated was never investigated. Indeed, in our time it has been publicly taught that all the different parts of the heart—that great central organ of the circulation—could act in concord without nervous influence. Even in our own day it has been a favourite experiment of some physiologists to demonstrate the heart of one of the lower animals beating when removed from the body, and consequently when cut off (as the term was) from the supply of nervous power. But you may, even at this early period of your studies, take it for granted that nothing happens in the human body without its appropriate cause. The different parts of the heart would no more act in harmony—now quicker, now slower, a sure index to the physician of the patient's state of health—the heart would no more so act without a cause than a stone would fall to the ground of its own accord. In both cases the cause long remained hidden from our view—in the one case in the centre of the earth, in the other in the substance of the organ; and in both they have now been revealed to us by the labours of philosophers and physiologists. Again, there are other actions in the human body that occur on certain occasions only: such are the acts of sneezing, coughing, vomiting, the peristaltic action of the intestines, and particularly the function of the womb during childbirth. Now all these actions take place quite independently of our will. They are reflex actions not under the control of the central nervous system. But it does not follow that these actions are not as accurately regulated as any in the system. The nervous centres which receive the necessary local impressions are connected by very slender ties with the great nervous centres which govern the voluntary motions of the body. They exercise an independent administration, and regulate the affairs of their own department even when the nervous centres connected with sensation and volition repose in sleep or are palsied by disease. That the involuntary muscles are as freely supplied by nerves as the voluntary muscles of the body—nerves connected with their own centres, their own ganglia, by means of which the various reflex actions are so regulated that they may be conveyed from any one part to an entire organ—is fully demonstrated by the series of dissections now before us.

"These preparations show the nervous system in some of the lower forms of animals. This system is seen in them to consist of a simple ganglion with radiating fibres, unconnected with even the semblance of a spinal cord.

"These drawings represent similar ganglia connected with the nerves of the womb of the human being.

"These demonstrate the hitherto concealed nerves of the heart, with their ganglia; so many telegraphic stations to ensure instantaneous communication to every part.

"Here, again, are displayed the nerves of the stomach and intestines.

"The series of preparations on the table demonstrate the same great truth as uttered by Nature—viz., that every muscle in the body is supplied with nerves which regulate and control its actions.

"I need make no apology for introducing these preparations to your notice in an introductory lecture, inasmuch as this is

the only hospital in London—may I say the only medical school in the world?—where such a series of preparations may be seen; and this is certainly the only school where the author of those dissections can himself demonstrate his labours.

"Judging from the reception that similar discoveries has had in past times, it is not unlikely that it will be said that the existence of these nervous centres—these ganglia, with their radiating nerves—was previously known. But a learned Society, by one of those singular acts of retributive justice which not unfrequently produce effects directly opposed to those which were intended, has for ever set its seal—marked with a deeper impress than could be stamped upon any medal—to Dr. Lee's claim, by having, at the period when the dissections were first shown, formally adopted the opinion that the parts dissected in these preparations were not nerves at all! And in Mr. Swan's most elaborate and beautiful plates published a few years ago, although the nerves and ganglia of the sympathetic system are admirably shown as they may be traced in the loose cellular tissue of the chest, yet is there no indication of any ganglia, any nervous centres, such as is shown in these preparations, in the substance of the heart itself. But to return from this somewhat lengthy digression.

"A general review of the facts now stated develops the general principle that *all* the muscles in the body are supplied with nerves of motion, and all are supplied with nerves of sensation: the only difference being that in one case those nerves are in close connexion with the spinal cord, are subject to the mandates of the will, and are regulated by sensations of which we are cognizant; in the other case the different systems of nerves have centres of their own, they do not depend upon the spinal cord for the due performance of their functions, and the influences transmitted to them are not appreciated by ordinary sensations. The so-called voluntary muscles are supplied by the first class of nerves; the so-called involuntary muscles by the second; and the muscles of the eye afford the example of an intermediate class, acting in many respects quite independently of the will, and yet regulated by a sense of which we are conscious."

We regret that our space will not allow us to give the remainder of Mr. Lee's lecture, which concluded with a just tribute to the memory of Hunter and of Brodie.

GUY'S HOSPITAL.

INTRODUCTORY LECTURE BY DR. PAVY.

THE lecturer commenced by saying,—The same; yes, the same old garment come round for wear again. Year after year, and for how many years past, had it not been regularly brought forward and placed upon somebody's shoulders. In use so long, not a particle of it remained that had not long since been worn quite threadbare. It had been turned and re-turned, and every fresh part, in its turn, had been picked out and put foremost, until all freshness had been extracted from it. The garment had this year been placed on his back, and he must endeavour to make the best appearance with it he could. To begin: he must tell the students that he did not intend to take them far from their everyday life in what he was going to say. There would be ample time to engage—he hoped profitably to engage—their attention during the time he could reasonably ask them to allow him. If in proceeding along his course he should happen to tread on anyone's corns he could only say he should be sorry for it, but there ought by right to be no corns to tread upon.

As students they must place a high value on their time. Covetousness, as a rule, was a hateful quality for a person to possess, but with them it might be said that it was a virtue to be covetous. His time was everything to the student, and it behoved him to see that it was turned to profitable account. It was always gliding so rapidly and imperceptibly along, that it was necessary for him to grasp it with eagerness and determination in order to succeed in bringing it into his service. There was something melancholy in the picture drawn by the great Dr. Johnson in saying about time, that when we had deducted all that was absorbed in sleep, all that was inevitably appropriated to the demands of nature, or irresistibly engrossed by the tyranny of custom; all that passed in regulating the superficial decorations of life, or was given up in the reciprocations of civility to the disposal of others; all that was torn from us by the violence of others; all that was torn away from us by the violence of disease, or stolen away imperceptibly by lassitude and languor, we shall find that part of our duration very small of which we can truly call ourselves masters, or which we can spend wholly at our own choice. Students, therefore, should be constantly on their guard. They would be constantly beset by thieves striving to rob them of their time. Let them beware of Thief No. 1—Sleep. Sleep kept them in their beds. They were not up sufficiently early to attend their nine o'clock anatomical lecture; or if they did put in an attendance, they did not arrive until it was half over. Such half-price attendance, as they called it, what was it? A conscience offering. Their principle of industry was not sufficiently strong to bring them to the lecture in time, and their conscience would not allow them to remain away altogether. Under these circumstances they took a middle course, which was of little or no good to themselves, and led to the disturbance of others. If they rose late they might depend upon it they would find themselves behindhand all day. They allowed sleep to rob them in the daytime; the evening might find them napping over their books, or they might be caught—yes, even so—nodding at lecture. "Resolution, my friends!" said the lecturer. "The influence of Morpheus may be strong, but your will, if you choose to exercise it, is stronger still." Thief No. 2 was Idleness. There were those amongst the students who came there almost exploding with eagerness at first for work. They were scrupulously punctual in attending every lecture—lectures, amongst the rest, that they had no need of at present. They rendered themselves conspicuous in the dissecting-room, and bustled about in the museum over their "bones." They were foremost amongst the students in going round the wards, and were to be seen at all operations. They had stocked their rooms with books, and altogether it would seem as though they meant that the whole of their comrades should be eclipsed. But, alas! in many of these cases the fire had been too strong to burn long. This excessive ardour vanished as the charm of novelty wore away. Such men soon began to make themselves scarce in places where they ought still to be seen, and unless aroused by the chance of circumstances, might ultimately sink into the position—he was going to say, and why should he not say it?—the deplorable position of idle men. Let them, then, not be over eager at first, for they might be disappointed in finding that their eagerness did not last. Beginning quietly, they would have an opportunity of looking round them, and applying themselves in the most advantageous manner to work. Steadily advancing, they would, day by day, strengthen their resolution, until ultimately they became, both by habit and by taste, industrious men. Thief No. 3 was the solicitation of friends. Save the student from his friends, if they happened to be idle men. Those who would not work were not content with doing nothing themselves, but preyed upon the time of others. They were just going into lecture perhaps, or had just sat down to study, when their friend dropped in upon them with an "I say, old fellow, come put that aside. It's all serene; there's plenty of time. You can do it by-and-by." Persist, and they would make themselves safe from future attack; yield, and they would very soon see their robber again.

The lecturer pointed out in felicitous language that there was no royal road to learning, and though geniuses might occasionally spring up amongst them, a genius had to work like others for what he acquired. Besides, eccentricity was a frequent accompaniment of genius. Men giving themselves up so much to one particular direction became neglectful in their observance of the ordinary customs and manners of society. But let them not think that in eccentricity there was any characteristic of genius, or that through eccentricity either of them could become a genius. If a man were not a genius, it was not the cultivation of odd ways—it was not by doing common things in an uncommon way, like Hudibras telling the clock by algebra, or like the tailor in Dean Swift's Travels, who was measuring his customer for a coat by the quadrant—it was not such as this that would make him one.

The lecturer having cited the cases of Madame de Genlis and the Earl of Chatham as examples of the necessity of securing for some useful purpose the least fragments of time, said that although he had laid down the law so strictly as to studying, he did not wish the students to be always at work, and never to seek amusement. They were aware of what all work and no play did in the case of that renowned personage going by the name of Jack. He pointed out that recreation was necessary, but that there was a proper limit to which it should be carried. There had been many a student who, in working for University honours, had fallen into the error of not allowing himself the necessary time the mind required for repose, and when the day of examination arrived, the mind had been so overworked, the bodily energies had become so exhausted, that the nerves had been agitated and the memory had failed,

and thus he fell short of what otherwise he might have attained.

Addressing the first year's men, he reminded them that they could not be expected to study advantageously until their resolution was their own, and they could fix and hold their attention as they pleased. A man accustomed to deep thought could so rivet himself to his point, that ordinary impressions failed to make themselves felt. He did not mean to say that it was desirable for them to encourage the development of such a power of abstraction. Far from it, for in the practice of their profession the perceptive faculties had to be employed as much, or even more, than the reflective, and they would have, as part of their duties in that school, to especially tutor their organs of sense—the eye, the ear, the touch,—so that their delicacy of action, their power of appreciation, might be increased, and the mind be supplied with the requisite information for the exercise of the judgment in the part it had to play.

Dr. Pavy adverted to the unattractive nature of the preliminary studies in which the students would have to engage, but assured them that perseverance would make them agreeable. Their studies had all been planned for them by the examining boards, and they would have no difficulty in discovering what course they were to pursue.

The lecturer defended the prize system which prevailed in the school, spoke of the strong kind of freemasonry which existed amongst Guy's men, expressed the deep regret which all connected with the hospital had felt at the departure of Dr. Odling, and then concluded with some remarks on the important subject of vivisection, which has lately excited much attention. He said,—

"The point that I am about to touch upon is one which has recently attracted a great deal of public attention, and in connexion with which the gauntlet has been so pointedly thrown down to physiologists, that it might be interpreted as evidence of weakness on our side if we did not take it up; and this is as fitting an occasion as any for the purpose. The matter I refer to is that of vivisection. Happily for society, it may be taken as admitted, that in every well-regulated mind a feeling of horror is experienced at the unnecessary infliction of pain upon any animal. Now there exists in our metropolis a Society composed of benevolent and well-meaning persons who have specially espoused the cause of the lower animals, and have, doubtless, effected the prevention of an immeasurable amount of suffering amongst them. Latterly this Society, looking upon any infliction of pain as unjustifiable, has been exerting its influence towards repressing the performance of experiments upon living animals for physiological or surgical purposes, and there are few who will not admit that room has here existed for their interference. But because the scenes that have been described of the suffering that has been occasioned for the mere purpose of acquiring dexterity in operative veterinary surgery which could just as well be effected upon the dead as upon the living animal,—because these scenes have justly excited popular indignation, are all operations upon living animals to be placed in the same category, and denounced as reprehensible? Are those who undertake operations purely for the advancement of science and the benefit of the community to be held up to public odium for doing so? Gentlemen, I belong myself to the class of experimental physiologists, and I am not afraid or ashamed to admit it; for I am ready to justify and defend my course. It is no argument to say that suffering, and often great suffering, is occasioned from the pursuit of many of the sports which the gentlemen of England engage in by way of pastime or amusement, and why is there no popular outcry against these? I willingly grant that one evil being left untouched, affords no justification for the existence of another. My argument rests upon a totally different foundation to this. I accept the challenge that has been thrown down, and I am prepared to meet the denunciators of experimental physiology upon their own ground. It cannot truthfully be denied that the knowledge which has been acquired through physiology has been the means of placing us in a position for averting premature death and alleviating the sufferings of humanity. It will suffice for me to mention the arteries; and is there anyone who will confront me, and tell me that surgery, from the information supplied by physiology, has not over and over again averted impending death, and mitigated an immense amount of suffering? If physiology, then, can be shown to have already done this, is it not fair to presume that it remains capable of doing more? Now are these anti-vivisection agitators prepared to take upon themselves the responsibility of restricting the progress of science, and defeating the efforts which are being directed towards enlarging our sphere of usefulness in affording relief to the sufferings of humanity? Let these persons picture to themselves the misery and distress occasioned by the premature removal of a husband and father—the grief at the untimely loss of a wife or a child, and say if they are prepared to incur the responsibility of frustrating the attempts to lessen these calamities; for such, and much bodily suffering besides, have oftentimes been averted by the aid that physiology has already given to medicine and surgery. Have these persons espoused the cause of the lower animals? Have they so far allowed their feelings to get the better of their judgment as to deny to their own species the benefits that may reasonably be expected to arise out of extended physical research? Upon which side, I would ask, does the greatest infliction of suffering lie? and especially when it is taken into consideration that in by far the majority of experiments, agents can be and are used for deadening the sensibility and thus allowing the operation to be performed without the production of pain. Happily for us, our forefathers have not allowed the policy to reign that is advocated now. Gentlemen, I love the lower creatures, but I love my fellow species more. It gives me pain to witness suffering in any living being, and carefully in my experiments have I weighed the advantages likely to accrue from their performance. But in what I have done I have conscientiously felt that I have been acting in the discharge of a duty for the benefit of the community, and I hope that no maudlin spirit of philanthropy will in future deter me from continuing such a course. Let us all, gentlemen, no matter in what position we may be placed, fearlessly discharge to the best of our ability that which we conscientiously believe to be our duty, and we can then have nothing to be ashamed of. Let us all have occasion to feel that we are employing to the best of our judgment, for the benefit of the whole community, the gift which nature has bestowed upon us and which places us at the head of the creation."

KING'S COLLEGE HOSPITAL.

INTRODUCTORY ADDRESS BY DR. GARROD.

AFTER a few preliminary remarks, the lecturer proceeded to speak of the object of an introductory address, which he considered to be, to point out to the medical student, more especially at the commencement of his career, the nature of the profession he had selected, its advantages and disadvantages; the character of the various studies he would have to pursue; the difficulties to be encountered, and the shoals to be avoided.

The profession of Medicine he regarded as one of the noblest which could engage the attention of man, having for its end the alleviation of human suffering and the cure of disease. Furthermore, it is one which, when properly pursued, necessitates an acquaintance with many other sciences, the study of which to an intellectual mind must be in itself a source of the greatest pleasure; in this respect Dr. Garrod considered that the profession of Medicine stood pre-eminent. It has often been urged that the highest honours of the State are not gained, that large fortunes are seldom made by the practice of medicine. Still nearly all are enabled to obtain a fair competence, some even affluence; besides which the greatest success in the profession must not be measured by its mere pecuniary rewards.

Dr. Garrod then proceeded to speak of the studies and acquirements necessary to enable any one to carry out the practice of his profession with satisfaction and honour to himself and with advantage to those who might be under his charge. And first of preliminary education. At the present time all the principal examining bodies demanded of the medical student a proof of the possession of a certain amount of erudition before being allowed to present himself for examination in subjects more strictly professional. These preliminary requirements would doubtless not only exercise a beneficial influence upon the status of the profession, but likewise enable the student more readily to grapple with the difficulties he would have to encounter in studies strictly medical; at the same time they involve a certain amount of previous mental discipline and training.

The more important sciences immediately in connexion with the study of medicine and surgery were then spoken of by Dr. Garrod. All would allow that a thorough knowledge of anatomy is absolutely essential to the medical man, and that its study has also the advantage of disciplining the mind and engendering precision of thought. Physiology is equally indispensable to the physician and surgeon, and without its aid the phenomena of disease would be altogether unintelligible.

The lecturer instanced that form of disease called facial

paralysis, and showed how all its features might be perfectly explained, provided we had even what would now be considered a most elementary acquaintance with the functions of the nervous system; but that without such knowledge the affection would be most perplexing and apparently of the greatest danger.

He then went on to review the advantages which chemistry had conferred on the study of anatomy, physiology, materia medica, and all the departments of clinical medicine, speaking of the rapid strides it had itself made and the stimulus which had been communicated by it to the other sciences. He instanced several examples of the value of a chemical investigation of the functions of a healthy body, as the function of respiration and the renal function, showing that by a proper quantitative examination of the secretion from the kidneys, and the chemical estimation of some of its more important proximate principles, a clue could be obtained to the changes going on in the system at large.

The lecturer also spoke of the extreme importance of an accurate knowledge of the chemistry of the food in reference to the proper nutrition of the body both in health and disease. Botany also was a science not to be neglected. Physiological botany was useful as enabling us to complete the series of relations between inorganic matter and animal life; and by the aid of systematic botany we are often enabled to determine by mere structure alone the nature of the important principles contained in a plant, and thus obtain a clue to its action on the system and its value as a remedy in disease.

Dr. Garrod afterwards alluded to comparative anatomy and physiology, and their great importance in connexion with human physiology and pathology. By the aid of these sciences we are often enabled to elucidate the value of certain structures in the human subject, and of the functions of many organs. Lastly, among the preliminary medical studies, he spoke of materia medica, defined its real boundary, and how it should be studied by the student in medicine in contradistinction to one in pharmacy only. He referred to the forthcoming Pharmacopœia and the advantages which must accrue to the profession from the union of the existing Pharmacopœias of the three kingdoms into one national work.

Having reviewed the subjects necessary to enable the student to commence the real investigation of disease, Dr. Garrod passed on to the consideration of Medicine and Surgery when studied in the lecture-room, but more especially at the bedside of the patient. He affirmed that the preliminary subjects, although most useful as aids, were of themselves quite inadequate to teach medicine; that medicine was as independent a science as any other; that disease had its own data, which must be carefully observed and recorded, and that from these data laws might be arrived at by the same processes of reasoning as obtained in other subjects. He, however, fully admitted that the value of the data obtained from careful observation depended greatly upon the amount of knowledge brought to play upon them, and that thus by the aid of chemistry, physiology, and other sciences new facts could be elicited; and, therefore, the physician, who, in his early career, has thoroughly devoted himself to the acquirement of such knowledge, must be far better prepared for the investigation of the phenomena of disease than he who is deficient in such information.

Dr. Garrod then dwelt upon the fact, which he felt should be openly and frankly confessed, that therapeutics is far in arrear of pathology. To some extent this is inevitable, as, for the successful treatment of a case, it is first necessary to understand its nature; but independently of this, clinical therapeutics had not been as carefully or diligently studied as pathology; and this want of advancement has given rise to much mischief and favoured the promulgation of various systems of quackery, many of them most absurd and even outrageous to common sense.

The lecturer then proceeded to speak of the method which should be pursued in studying the treatment of disease, and expressed a hope that ere long we should have good ground for congratulation on this subject. That medicines have great power in combating morbid action must be apparent to any one who had paid the least attention to the subject; and, on the other hand, that the natural progress of disease is not always easily diverted is equally patent; still, the expectant plan of treatment, so much in vogue on the continent, and which has recently influenced some of the medical profession in this country, although most valuable as a means of obtaining data in the natural history of disease, is certainly not the one most conducive to the welfare of the patient. Already the clinical study of therapeutics by the aid of modern methods of investigation has done much, if not in the discovery of new modes of treatment, at least in at once demonstrating the value of those which accident had arrived at, and which otherwise would have required the experience of many years to confirm.

Dr. Garrod then endeavoured to show that although the sciences in connexion with Medicine, and even Medicine itself, are rapidly progressing, yet the difficulties which the student has to encounter are not necessarily increased; for as a science advances, and facts multiply, generalization takes place, laws are discovered, and the whole reduced to greater simplicity.

In conclusion Dr. Garrod impressed upon the students the absolute necessity of hard work in order to become eminent, or even successful, in their profession; no superiority of intellect, nor even the possession of so-called genius, could make up, he affirmed, for want of industry. He then alluded to the impression abroad that the study of some of the sciences in connexion with Medicine, more especially physiology, had a tendency to engender infidelity. He asserted that this circumstance could only arise from taking a narrow view of the subject, from regarding man as a mere animal, only a little higher than the brute, from measuring him simply by his material organization, and regarding his higher faculties as products of such organization. Were this correct, he would indeed be helpless, yet "man is the undisputed lord of the creation." To explain this elevated position we have proof, obtained from higher sources and more convincing evidence than can be derived from the study of matter, that man possesses, what has been denied to other animals, the "breath of life," an immortal soul, which assures him that his existence will not terminate with the dissolution of his corporeal frame.

LONDON HOSPITAL.

INTRODUCTORY LECTURE BY MR. MAUNDER.

MR. MAUNDER commenced by observing—"This day, the 1st of October, is one of peculiar interest to the medical profession of this country. It is an occasion on which all ranks of our order assemble to inaugurate a new session. Old and young meet together on the same benches: the former to shake hands with old friends and fellow-students, to chat over the pleasureable recollections of earlier days, and possibly to introduce a son to the well-remembered walls; the latter, full of hopes and fears, freed from the discipline of school, and eager to commence the great work of life."

Having offered a hearty welcome to all, he assured the junior members of his audience that every assistance would be given by his colleagues and himself to those who earnestly desired to store up that fund of information which is to be the groundwork of future practice. He urged them to believe that the profession of Medicine demands great labour, both mental and physical, and the exercise of the highest moral qualities; that the preparation for it was by no means agreeable, and the practice of it often disheartening. On the other hand, he declared the profession to be a truly worthy and beneficent calling, ensuring to the industrious an honourable competence, and affording a consolation amidst its various trials, "in the ever-recurring knowledge of the fact that the honest exercise of our vocation tends to soothe and alleviate human suffering, and to elevate our own natures."

In reference to subjects for study, the student should give a fair share of time to each, "since to neglect or slight one would be to imperil his success in all.....Let him take *method* as his guide, and joining thereto industry and perseverance, he will find that, instead of clashing with each other, each branch of learning will serve to forward and elucidate the rest.....But mere abstract study is not enough: the faculty of observation must be highly cultivated; and results thus obtained must be referred to the mind, there to be sifted and elaborated, so that from the crude substance of facts may be educed essential principles. Knowledge painfully and laboriously obtained—fought for, as it were, inch by inch—conquered and made your own, is worth whole volumes of theory, though you had them all at your fingers' ends, and could repeat them as readily as your multiplication table.....In conducting an operation, the eye is often of little use in guiding the hand of the surgeon. He must call to his aid a faculty—*creative memory*—which will depict for him the exact state of things beneath the surface of the skin—lay bare to him the position of the parts, both as they ought to be and as they now are in consequence of the injury sustained. By thus bringing the memory to bear upon cases where the eye is comparatively useless, the intelligent

practitioner, from slight superficial indications, should be able to detect what lies below with unerring accuracy, and proceed as unhesitatingly to his work as if the hidden field of his operations lay spread out before his gaze."

Of recreation, Mr. Maunder remarked—"It is as needful to recruit the strength of the mind by light and instructive reading and innocent amusements, as that of the body by rest and manly exercises; and I know not how these can be better attained than by a run in the country (with a book under your arm if you please), even though it be for only a few hours at a time. To further this view, I am an advocate for regarding Saturday as a *dies non* in the hospital calendar. The acquisition of professional knowledge alone is not sufficient to qualify you to play a satisfactory part on the stage of life. You will be brought in contact with all classes of society, and should therefore give the time allotted to mental recreation to the acquisition of general literature, that your conversation may be instructive and agreeable and your company desired..... I would also strongly advise you to cultivate some non-professional pursuit, some one or more of the collateral sciences. Such knowledge will always be a source of pleasure, and may become of pecuniary importance to its possessor. A character for general intelligence will tend rather to promote than to impede success. It will also afford agreeable occupation in retirement.

> 'When years no more of active life retain,
> 'Tis youth renewed to laugh them o'er again.'"

The lecturer then advised those who had the means, to travel before settling. "To one, a sojourn in one or more of the European capitals would be attended by pleasure, and, if properly used, by profit too. By a careful apportioning of time, all objects of interest to a stranger in a place, as well as the hospitals and schools of medicine, could be visited, and the practice of our foreign brethren be observed. To another, a voyage in medical charge on board ship would commend itself; to a third, the post of medical attendant on a nobleman travelling either at home or abroad might be agreeable; while a fourth may select for his path in life, and await his opportunities for travel in, one of the two services." Referring to the conduct of the authorities towards the Army Medical Department, he said: "Such treatment is unjust, and such policy short-sighted. Were it not for the Medical Department of the Army the force would be very differently constituted. Instead of being composed of men remarkable for their *physique*, it would soon become a mere sickly horde, inefficient in the field, and uselessly expensive to the country. It is surprising, too, that the combatant officers are unwilling to promote the advancement of their medical brethren. Do not their health and life depend often upon the knowledge and skill of the surgeon, whether exercised in peace or in war? Since it is evident that the Medical Department of the Army does not receive that consideration from the authorities which is its due, it is my duty to advise you to become fully acquainted with the precise relation of the Medical Department to the other branches before you enter the service as an assistant-surgeon."

On the subject of prizes, the lecturer observed: "I am happy to say, only two, and those for general proficiency, are awarded to the meritorious student of this hospital. But his zeal will not go unrewarded; he will have the opportunity of acquiring that practical insight into his profession which is the *summum bonum* of his labours, without extra fee: he may become clinical clerk, house-surgeon, &c. &c. And who will tell me that knowledge thus acquired will not be of infinitely greater value to a man in after-life than gold medals in elegant morocco cases, or certificates of merit handsomely framed and glazed?"

Speaking of examinations, Mr. Maunder said: "While students, I need scarcely say that your first duty, and your interest too, consists in preparing yourselves to become legally qualified to practise your profession; and in reference to the College of Surgeons, let me advise you to keep the ordeal which you will have to pass through there constantly before you, that you may be so well prepared that no misconduct on the part of any member of the Board—no 'catch question'—can disturb your equanimity.....Besides being well-informed, the medical practitioner should be a gentleman in every sense of the word. Let him cultivate easy and agreeable manners, which are quite compatible with sincerity, and avoid any eccentricity, either of dress or otherwise, which may offend society. He should be kind and courteous to his patients, but withal independent, never forgetting that he who possesses no self-respect has no right to exact respect from others. That the profession be respected it is absolutely necessary that its members respect the prejudices and opinions of each other; be careful therefore how, by word or even by gesture, you undervalue the opinion expressed, or treatment adopted, by a brother-practitioner, either to a patient or to his friends. That doctors have differed in opinion is certain; but that axiom is no argument against the exercise of 'charity.' Let me beg of you, then, to exercise this virtue on all occasions towards a brother-practitioner."

The lecturer proceeded: "The very object of our vocation—truth—demands that we be honest;" and then referred to the distinction between physician and surgeon—the "pure" physician and the "pure" surgeon, the hospital physician and the hospital surgeon. "What is meant by the term 'pure' It infers, I presume, that the individual purports to practise either medicine or surgery only; and to qualify himself to take a high walk in his profession. All his abilities are concentrated upon the study of the one branch without a commensurate and progressive knowledge of the other. It is true that during the first years of his professional life he has studied medicine and surgery equally; but his hospital appointment compels him to give the preference to one or the other, and thus, while his opinion is valuable in the one case, it is of little worth in the other; and it is upon these grounds that I hold the physician to be unqualified to give a sound opinion in a surgical case, and the surgeon to be incompetent to take a right view of a medical case. Gentlemen, I am of opinion that the consulting physician or the consulting surgeon who takes all fish that come to the net, who considers all patients that can pay a fee as belonging to his specialty, does a great injustice both to the patient and to his brother-practitioner, to whom custom and education assign the care of individual cases. It appears to be sufficient for a medical man to be thought clever, no matter whether he be physician or surgeon, and the public are eager to consult him in every imaginable case. Such a step taken by an individual without the advice of his usual medical attendant, is consequent on unavoidable ignorance; but are we to take advantage of this ignorance, and perhaps jeopardize the health and life of a fellow-creature? Certainly not. It is our duty to refer the patient to the right man—to exercise those qualities which the practice of our profession teaches, benevolence and charity. It will perhaps be said that it is useless to expose an evil without having a remedy to meet it. The antidote is in the grasp of the individual practitioner, and its application too. There is possibly one means—the only one that has occurred to me—by which the public may be assisted in the selection of a physician or surgeon: it is, that the consulting surgeon should emphatically declare his calling by replacing the 'Mr.,' or 'Mister,' by the word 'Surgeon,' both on his door-plate and private card. This peculiarity would probably give rise to discussions and inquiries amongst the public, and thus my object might be slowly attained, and the moral courage of individual practitioners, in refusing a fee, would be less often tested. I have asked you to exercise benevolence towards suffering humanity, but must warn you against indiscriminate charity. And here I allude to the practice of giving advice gratis to all comers adopted by many medical men at their own private residences. I shall perhaps be told that a desire to do good, or at least an anxiety on the part of the practitioner to be afforded opportunities of acquiring knowledge from an extended field of observation such as the limits of private practice do not yield, induces such conduct; and I am willing to accept this explanation on the part of those members of the profession who are not attached to a public institution. But no such excuse can be offered by those of us who distribute hospital benefits, and the only motive which I am compelled to assume prompts this line of conduct is an excess of self-interest. But this is not all. These recipients of advice gratis are often well-to-do but naturally mean folk, always ready to take, but never ready to bestow their substance, who are barely grateful for a kindness, and even venture sometimes to declare, that the practitioner, instead of conferring, is accepting a benefit. But I would make two exceptions to my objection to advice gratis: let the advice be given by desire of a brother-practitioner, and for his indirect benefit, but not for the advantage of a patient in whom the adviser is in no way interested. It is not less rational for a medical man to demand bread of his baker than for the public to expect advice gratis from us. Most gratis-patients can afford to pay something, and if hospital physicians and surgeons give advice gratis at home, even the half-crowns and crowns, which barely remunerate for his time and trouble the practitioner whose lot is cast in a poor neighbourhood, are withheld. The second exception I would make in favour of certain educated classes in society who are compelled to keep up what is called an 'appearance,' but whose means are so limited that the

doctor's bill would materially cripple their resources: I allude to governesses, tutors, and many of the junior clergy, to whom our substantial sympathy would be most grateful."

In alluding to the "operation day," the lecturer thought it very desirable that the surgeons attached to hospitals should make a point, not only of displaying their manual dexterity, but of explaining to the class the why and wherefore of the operation. "Now, would it not be more dignified, and at the same time more courteous, if the surgeon, before commencing, were to explain in a few words the nature of the disease or accident, the treatment to which the patient had been subjected, and the various steps of the operation he is about to undertake? But I will go a step further. You will admit that the value of an operation is proportionate, either to its capability of saving life, or to the degree of usefulness which it confers; and that all may judge of its utility, I would suggest that the result be made known occasionally, at the option of the surgeon, by an exhibition of the patient in the theatre on an 'operation day,' a sufficient lapse of time having been allowed in order to test its worth. In conclusion, let me remind you that the study of Medicine, f pursued in a right spirit, will have a tendency to turn our thoughts to the Great Mind that planned the universe.....Surely no profession can be more honourable than ours, except that great profession whose ministrations are not physical, and whose influences do not cease with the term of our brief mortality."

ST. MARY'S HOSPITAL.

DR. MARKHAM'S INTRODUCTORY ADDRESS.

AFTER a few preliminary remarks Dr. Markham said, that instead of reading the students a homily demonstrative of their duties, he should venture to occupy their attention shortly by referring to a phenomenon which is thought by many estimable members of the profession to be a deplorable error, characteristic of the present generation of Medicine—the existing scepticism concerning the effects of remedies over diseases. "I will endeavour," he said, "to show you that there is here, as in other matters requiring the exercise of the judgment, a true and a false scepticism—a reasonable and an unreasonable faith; and I hope I may be able to satisfy you that the scepticism of the times, in so far as it is reasonable, is simply the search of honest and inquiring minds, guided by the light of modern science, in pursuit of truth. I shall have, in doing so, to refer particularly to what seem to me to be two serious obstacles to the advance of our therapeutic knowledge. The first of these is the unreasonable deductions which men of our profession are wont to draw from what they conclude to be the effects of the remedies employed by them in the cure of disease; and the second is, the practice, once so common and not yet wholly abandoned by us, of prescribing drugs in those cases in which drugs are admittedly not required for the cure of the patient."

Dr. Markham then went on to show how the practice of medicine is being remodelled and revolutionized under the influence of modern scientific investigation. "Never at any period of the bygone days of medicine did science—as we now understand the term—subserve the physician's purposes in the cure of diseases. His diagnosis was most defective, his theories of the nature of diseases, for the most part, baseless fabrications, and his treatment was necessarily on a par with his diagnosis and his theories. Our forefathers erred because, dealing with matters of the utmost complexity, they possessed no other light to guide them through the labyrinth than experience—experience whose fallaciousness in matters medical the Father of Medicine has so emphatically revealed. But to us science—the tree of knowledge of good and evil—has come, bearing with it the fruits of present painful doubts and difficulties, and, we may safely add, the full assurance of great future good. It has demonstrated to us the errors of the past, and has shown us how we may struggle out of the errors which have heretofore beset the path of medicine. We are now beginning to learn what are the limits of our powers as curers of diseases, to moderate our pretensions in that way, to appreciate the line of demarcation which must be drawn between what is positively true and what is possibly true and what is positively untrue. I believe that now for the first time in its history our art is finding something like a sure foundation to rest upon, and that it has entered on the path by which alone it can ever hope to reach the position of a science. Our actual knowledge of disease and of its treatment, though it be limited, is still, as far as it goes, in one sense becoming sure. We can now mark where our positive knowledge ends, and where our treatment becomes experimental, and can calculate nicely the worth of the theories and the worth of the practices which we follow out in the cure of disease. We can, in fact, estimate the limits and the value of our therapeutical powers. What is it, indeed, which most essentially distinguishes rational scientific medicine from barren empiricism, but this very knowledge of its imperfection, this philosophic estimate of its actual power over diseases? Who now but the veriest quack boasts of his unlimited powers and of the infallibility of his remedies? The fermentation which Medicine is now undergoing is, as I see it, a process of its purification from the errors which have corrupted it during past ages. How can we ever hope to arrive at a true theory or practice of medicine until all the vicious theories and practices which have directed, and, of course, viciously directed, the hand of the practitioner to his work have been cleared away? We of this generation cannot hope to see that consummation—the elevation of Medicine to the rank of a science. We must be contented with the humble task of assisting in the removal of the errors engrained in it. We must be content to collect materials for the reconstruction of the building. We must moderate our pretensions, and be satisfied with that true and legitimate knowledge which comes to us as the offspring of rational scepticism enlightened by science. We must subject our daily and ordinary methods of treatment of diseases to the test of a reasonable inquiry, and learn whether they be really worthy of that full confidence which we repose in them. The sources of the deepest errors in therapeutics may, I believe, be traced to the overweening confidence which men have placed in what is called personal experience—that infallible oracle from whose dictum there is often no appeal. They have been content to bring into immediate relation—as cause and effect—the two extreme factors of this most complicated problem—the giving of the drug and the recovery of the patient, leaving out of the calculation that infinite number of disturbing causes which affect and interfere with what is in truth the experiment—the effect of the remedy over disease.

"Let me, then, point out what I consider as the only test by which we can determine what may be called a therapeutical fact founded on experience. I believe that it must have something of the following definition:—It should be the resultant of very numerous observations made by fitting and capable inquirers, who, after due inquiry, have arrived each at a like conclusion, the conclusion not being contradicted by the observation of others equally capable of observing. The wide and uncontradicted acceptation of the deduction alone gives it a stamp of genuine value—entitles it to the name of a fact. Are we not, indeed, logically driven to the conclusion, that the real virtues of a remedy have yet to be decided, so long as the experience of half the world applauds its use, and the experience of the other half condemns it as useless? Is it not illogical, in the satisfaction of this most complicated problem, to permit our personal experience to degenerate into solid convictions, so long as the experience of others has not confirmed or is opposed to our own? If this reasoning be right, it follows of necessity, that in every case in which there exists (amongst competent observers) discordance of opinion of the kind spoken of concerning the effects of a given remedy over a given disease, the true effects of that remedy have not yet been definitively settled.

"The great lesson, in this way, taught us by scientific investigation is, that our estimate of the value of this or that drug, or of this or that method of cure, must be derived, not from what we have been too apt to regard as the unanswerable conclusions of our own personal and therefore limited experience, but from a comparative consideration of its value, as estimated by the experience of others. A reasonable scepticism teaches us to try our personal convictions by the convictions of others, and modestly to accept the conclusion.

"The other drawback to the advance of therapeutics to which I would call attention is, the too common habit of prescribing drugs on all occasions, whether they be or be not required. This error, I believe, has injured our profession deeply both in its scientific and in its social aspects. Doubtless we are in this matter much under the influence of custom, under a somewhat slavish adhesion to the habits of our forefathers. In other days the very soul of the treatment of diseases was thought to lie in the lancet, the bolus, and the draught—these things were in all cases regarded as essentials. We know, however, that there are diseases in which medical treatment of the most effective kind does not involve the administration of drugs. But is it not a fact that the writing of a prescription is, as a matter of course, a part of every medical consultation? Does the very term, in its ordinary acceptation, mean simply and solely the

writing of a drug-formula? The patient looks for the cabalistic formula as the chief equivalent received for his fee. We, I fear, have educated our patients in the belief that the cure of diseases and the taking of drugs are in all cases things inseparable. I believe that the result of this is injury to the patient and injury to the profession. The patient is led to think that he has done all that is necessary for his cure when he has swallowed his draught, and neglects those other directions which it may be are essential to his cure. To this error also may, I believe, be in great part traced the spread of many quackeries and delusions. Our patients have been educated in the belief that the drugs they take are in all cases, not merely elements, but essential elements of their treatment; and this, too, sometimes even when the physic is as mild as coloured water. But surely it is not worthy of the medicine of this day to play down to the weaknesses of the patient. Rather it should be our duty to take away the scales of their delusions from his eyes. But do not suppose that I want to inculcate the idea that the cold shade of scepticism hangs over the entire practice of medicine, and that drugs are useless as remedies. I simply ask what seems to me most reasonable: that we should give drugs only when drugs are required, write no prescriptions of complaisance, and give no physic on the principle that 'it will do no harm.' Nor imagine either that I mean from what has been said to infer that we have no positive facts in therapeutics to rest upon. I could run on for an hour and give you examples of that kind of accordance in treatment which justly gives to it the title of rational. I would simply impress on your minds the cultivation of a reasonable faith in the power of our art to cure diseases, and so save you from that blind scepticism—that dead sea of negation—into which unreasonable and disappointed expectations too often lead the enthusiastic. I would save you from that irrational credulity which finds its most perfect exposition in the insolence of quackery; and would dispose you, by forming your faith in the power of medicine in accordance with the reason of the thing, from ever falling into that atheism in therapeutics, which is born of an overweening credulity and of deluded expectations.

"In so far as the practice of our art is still an experimental practice, let us, I would say, pursue it as philosophical experimentalists, not with the credulity of pure empiricism. In all cases let us fashion our belief in the power of our art in accordance with the light we possess. I do not ask you to sit idly by whilst disease is working its ravages. When the human body is sick, the physician's art has ever its useful labours to perform. I know of no disease, I know of no phase of any disease, wherein the presence of the healer is not required to conduct the cure, wherein he may not practise his art—do something—to the advantage of his client. My desire has been simply to warn you against the adoption of that unreasonable course in the treatment of diseases which, as I have attempted to show, deceives ourselves, deludes the objects of our treatment, and hinders the progress of therapeutics. Rather, indeed, I ought to say, that I have attempted merely to utter a few words in favour of that rational spirit of inquiry which has already entered into and is leavening the practice of medicine."

Dr. Markham concluded with a few special remarks to the students, urging them above all to do their duty as honest and scientific students, that being the surest way to an honourable position hereafter and the greatest safeguard against all lapses into irregular professional practices.

The practice of medicine, he told them, is a stern and rugged business; "I would therefore earnestly bid you now brace yourselves for the future occasion by training your minds to an unswerving performance of duty. So study now, that you may become scientific practitioners of medicine. It is a consoling fact that men of science do not practise quackery. Homœopathy, the most successful of the quackeries of the day, is a striking illustration of this. I do not know, nor did I ever hear of, a homœopathist possessed of a name known in the world of science. We see the names of Harvey and of Jenner and of a host of such-like worthies inscribed on the edifice of Medicine. In all times men of our liberal profession have disported themselves in different fields of science—in chemistry, botany, geology, mathematics, theology, in every branch of human study; but we look in vain in this way for one single name which might serve to relieve the dark shadow of quackeries. Be then scientific, honest, and conscientious students now, and you will lay the surest foundations for becoming honourable and scientific practitioners hereafter. Keep the law of duty ever before you. Study conscientiously, religiously, as the Frenchman well puts it. And when you have gained this conscientious, this religious knowledge of your profession, use it ever conscientiously. Be, at all events, brave and on the square with your conscience to the last. Your success in life may not equal your hopes, or your deserts; it is not in man's power to ensure success. But, gentlemen, so long as you obey the dictates of that inward monitor you may, like that knight of ancient chivalry who had lost all in the battle, still proudly boast that nothing is lost, because your honour and your conscience are intact."

MIDDLESEX HOSPITAL.

INTRODUCTORY ADDRESS BY MR. NUNN.

AT no epoch in the history of Medicine have the times been more pregnant with events affecting the interests of the medical profession than the present. I feel therefore how great is the responsibility of addressing this assembly, which includes not only students, but practitioners and others who take an active part in promoting the study of medical science. I feel the responsibility greater, when I reflect how rapid has been the development of the medical profession. It is not yet fifty years since legislative enactment gave some degree of unity to the great mass of the profession, and how surprisingly has organization permeated that mass! And organization and corroboration are still going on, and are converting the profession into a compact whole, as crystallization converts what is wanting in cohesion into the solid and adamantine.

The day-by-day increasing development of the importance of medical science, and the expansion of its sphere of application, demand from all connected with it ever fresh labours and greater energy. Progress is, in consequence, now more than ever essential to the vitality of Medicine, and to the maintaining its present position amongst the sciences. There is no finality in science: the more that is known, only teaches how much there is yet to learn; as in ascending a mountain, the higher one reaches, the more is seen spread out to one's gaze; objects which at a lower level stood out conspicuous against the horizon are now scarcely distinguishable specks in the mid-distance.

That I have the honour of addressing you as students of this hospital this evening is a circumstance itself due to the organization of medical study. We are met here to inaugurate the commencement and to encourage the renewal of your study of subjects of a complex curriculum, the end and aim of which is to fit you to practise the medical art. That the task you are about to undertake, that your future labours, are of no ordinary character, and that the present moment is an important one in your lives, is not only told you by your own feelings, but is testified to by the assemblage among us to-night of many of the former students of this medical college, whose presence is as cheering and grateful to their former teachers as complimentary and encouraging to you. And not only is your entry into the ranks and remuster thus greeted by those who have fought and won in the field in which you are about to try your fortune, but by others whose kind and enlightened interest in all that concerns this school it is my duty, on behalf of myself and colleagues, gratefully to acknowledge. Fortunately you all come to your task more or less prepared, either by preliminary studies or by previous experience here; and your future studies have been systematized—the order in which you are to pursue them has been laid down, so that you are relieved of the perplexity of having to choose with which to begin. They are nevertheless multifarious, and some of them of very opposite character; notwithstanding, you must apply your minds equally to all, recollecting that the various branches of science, however diverse they may appear to be, have a cosmical relation to each other. Some studies you may find quite in accordance with your natural tastes; for others you may have an innate dislike. In the one case you may have to restrain a predilection, in the other to overcome a repugnance.....

Lectures, books, the dissecting-room and the museum, the wards of the hospital and the dead-house, comprise the machinery by which you are to acquire a knowledge of the various branches of your study. As to lectures, it is doubtless somewhat tedious to sit out an hour's lecture, and fatiguing to daily attend several such lectures; but tedious and fatiguing as a regular attendance may be, an occasional and irregular attendance is infinitely more so. By the first, every day places work done behind you, and gradually develops the form and outline of what you seek to grasp, as, after much weary labour, every touch of the sculptor's chisel adds life and action to the statue. By the contrary course, the end of the session will

bring but the mortifying conviction that all has to be begun afresh. It is not altogether an unknown thing to find a student who despises lectures as old-fashioned, &c. In the end, such a student often comes to despise something else, and to discover that his own untested method, which was to float him high above the heads of humbler men, has somehow or other let him ignominiously drop.....

Books must be made friends of, to be taken under the arm. The sigh of despondency which will perhaps, in spite of yourselves, escape when you contemplate the broad back of some compendium of medicine or manual of surgery, will give place to the smile of complacency when you have thoroughly become acquainted with it, so that, automatically, any page will turn up to your familiar touch. In reading through a book, you must travel as along the road on a tour, with a light elastic step; if you only crawl along, you will soon become exhausted, missing the exhilarating influence of continually changing scenery.

Begin dissection as soon as practicable. Never attempt fine or minute dissections until you have a good general knowledge of the whole body; but having acquired that knowledge, then teach your hand to go as far as your eye can lead it.

The museum is too generally looked upon by students as a place to stroll into on rare occasions. It should be understood that it will be most profitable to examine every preparation and specimen by the aid of the catalogue, in which all allied preparations are classed together. Do not go into the museum, then, and cast your eye here and there as people do who dawdle through picture galleries, turning only to the catalogue for what may happen to arrest the eye—a proceeding that, by the way, seems generally to terminate in a headache and loss of equanimity; but, systematically and with a definite plan, go over at each visit to the museum some one series of preparations.

Leaving the lecture theatre, the library, and the museum, we enter the hospital. Our chief difficulties now begin. Your preliminary training will prove of the greatest service in helping you to acquire knowledge from books and lectures; but into the wards of an hospital you go to study a new language, the alphabet of which is partly to be seen only like that of a language which cannot be spoken—partly to be heard only like that of a language which cannot be written—partly to be touched only like the embossed page by which the blind are made to read. When the heterogeneous alphabet has been mastered, you will at first have laboriously to spell over every letter of every word before you will make out a sentence, or, in other words, before you can satisfactorily observe a single case; but the faculty of observation is to be acquired, like any other accomplishment, by practice; and to this end let me offer you the following advice: Never enter a ward without your note-book; never leave it without having registered an observation or a fact, even if at first you but copy a prescription and the name of a disease. If you will but begin even in this humble way, and follow the advice just given, you will at the end of your studentship have accumulated a valuable store of information, on which you may draw in after-years. You must bear in mind that case-taking will be one of the chief occupations of your lives. One cannot attempt to treat a patient without first ascertaining what is the matter with him—that is, taking his case, whether you commit it to writing or not; and the quicker and more accurately you can take a case, *cæteris paribus*, the greater will be your success in practice.

There is a great peculiarity in clinical study—that is, this observation of cases in the wards of the hospital—namely, that the subjects of your study are human beings placed where you find them, not for the purpose of affording you lessons in disease, but by the chances of a hard fate that has either slowly and surely fitted them to be objects of charity or has suddenly seized them from the midst of a life of independent and honourable industry, and has transferred them almost in the twinkling of an eye from the busy workshop or crowded thoroughfare to the strictly regulated ward and the companionship of the helpless, the maimed, and perchance the dying. It is my solemn duty to offer a few words of caution, kindly meant to all, as to your bearing while within the walls of the hospital itself. All *levity* is to be avoided as a crime: recollect that thoughtlessness will be viewed very differently by one full of health and spirits and by one whose fracture may be caused to ache for hours, or who may possibly be thrown into even a convulsion, by the simple jarring of his bed. Truly has said our poet laureate,

> "A little thing may harm a wounded man."—*Morte d'Arthur.*

When art and skill have failed, and disease has claimed its victim, follow the body to the post-mortem room, where the cold clay its lesson yields. It is there that much of your work in the lecture theatre and dissecting-room will realize for you much gain. Familiarity with diseased structure and morbid appearances will give you confidence under trying circumstances: I allude just now especially to such circumstances as you are sure to be placed in, in medico-legal investigations. It may depend upon your dictum whether suspicion shall be aroused or shall be removed; whether the murderer shall escape or the innocent be unjustly arraigned. In your everyday conflict with disease in practice, a sound knowledge of pathology will be required; even with that knowledge you will be occasionally at fault, but without it continually so.

Such being the nature of your studies, and the means of prosecuting them, it will be well to consider what qualities of mind and body you must bring with you to succeed in your purpose: you must bring, not the delicately gloved hand, but the hard fist of determination and perseverance; you must never permit yourselves to be disheartened. The first few weeks of your residence in London will sorely try your faith in yourselves. The impressions you most desire to retain you will find indistinct and evanescent. It is so frequently to be observed, that students beginning energetically faint after the first few paces of the race, losing heart at their inability to retain what they read and hear. Be persuaded that this treacherousness of memory is but a transient disorder, and ought not to lead to chronic despondency. Remember, that with Englishmen to fail implies success; and that to say that an Englishman is down, is but another way of expressing that he is about to rise. Not only must you have this determination not to be beaten, but the ambition to conquer; not the vaulting ambition that "o'erleaps itself," but a much more practical quality. Let "*excelsior*" be your motto, but let it mean "I strive to be better than I am." Let your competitor be yourself; secure a *daily* improvement, however small; do not trust to violent and spasmodic efforts. The daily plodding, persevering effort is as the slow but irresistible lift of the screw compared with the sudden hoist of the lever: every inch gained is safe; there is no fear of a retrogression more rapid than the advance.

The subject of prizes, I may here mention in connexion with this point, has been one of anxious consideration with the lecturers of this school. It cannot be denied that prizes excite a spirit of emulation, and thus to a certain extent lead to greater effort. On the other hand, it is to be feared that emulation may give rise to other more objectionable feelings on the part of the competitors, and thus the *morale* of the competitor may be deteriorated while his intellect is being sharpened. But it is again a question whether a student may not naturally expect to be provided with the means of measuring his powers against those of his fellows, and of being able to produce tangible proof of his diligence. Mainly, then, in such a sense we offer prizes. As a body we have made no effort to establish a number of prizes of high money value. Medical students mindful of the essence of their mission ought not to require any such inducements to throw themselves body and soul into the study of their profession.

Whether you work with yourself or your fellow as your competitor, the preservation of your bodily health is as important as your success; in fact, it is essential to it. Sufficient sleep, food, and exercise, more than you perhaps imagine, will contribute to your progress. I make no apology for referring to such matters: a judicious General looks as closely to the shoes of his men as he does to their weapons. There is no real gain in devoting to reading hours that nature has assigned to rest. Without a healthy state of the body, the intellectual faculties are unable fully to come into play. It is difficult in London, perhaps, to obtain the proper amount of out-door exercise; but cold bathing and the simplest gymnastics will in a great measure compensate.

Again, relaxation is necessary for fresh endeavour. Idleness, however, is not relaxation. This city offers the amplest opportunities for self-culture, of which you may avail yourselves by way of relaxation. Since many of you are destined to pursue your profession in distant countries, how much to your advantage will it be to have some general as well as professional knowledge! and when, as practitioners, you find yourselves thrown into intimate social relation with those who have had every advantage in the way of education that wealth can give, if you do not let the opportunities of self-improvement pass unused, it will be hard if you need fear comparison by contact.

Assembled here with a common purpose, you cannot consider yourselves as a fortuitous concurrence of individuals, each entitled to pursue independently that course which may happen

to be most agreeable to himself. It is contrary to the nature of things that individuals can be associated without mutually influencing each other. You have then to undergo, not only a technical training, but a moral and intellectual development. Admitted as a student, you incur obligations to your neighbour: one of the most binding is aiding your fellow-student in his pursuit of knowledge. Students should join hand in hand in the acquisition of knowledge, and avoid as the greatest evil a churlish, selfish exclusiveness, unless ambitious of leaving their *alma mater* without the choicest blessing she can bestow—good and true friends and happy recollections.

"Poor is the friendless master of a world."

Mutual instruction, more than any other thing, tends to elevate the general character of a school. A high average of acquirement is scarcely to be gained by any other means, and influences consequently the success of students, as a body, at the examinations.

The habit of gentleness and kindness towards the poor sufferers who will be under your observation is to be especially cultivated. Sympathy with the afflicted is not an instinct, as some may imagine. It is the result of a combination of higher and rarer qualities, or of education and religion. How many passed the helpless wayfarer before the good Samaritan bent over him to pour oil and wine into his wounds! The Samaritan's was so exceptional an act, that his charitable deed will continue to live as a bright example as long as the human race shall remain what it is.

The majority of you whom I now have the pleasure to address, probably will have come here with your studies only to occupy your time. There may be some not so advantageously placed, and to such I would first say a word or two of encouragement. If we turn to the list of our most distinguished prizemen, I could put my finger on the names of more than one who, during the period of their studentship, had been daily engaged, for some hours at least, in performing the duties of an assistant. The younger of you I would remind of solemn obligations—namely, to those at home, by whom your career will be anxiously watched—to the parents to whom your well-being is almost more than life itself, and by whose industry and self-denial, it may be, the means for your education and comfort have been provided. But to those whose term of studentship is drawing to an end, I would earnestly recommend the devotion of this current session to clinical study. One may reasonably assume that you have by this time learned to observe; but there is something further to be done: you must learn to infer, and as you go along in your observations, you must translate to yourself what the symptom observed means, and what are its bearings in respect of other symptoms; and when all the facts of the case and all the symptoms are carefully considered together, you may arrive at a correct diagnosis. And you must likewise begin to compare one case with another, so as to gain a view of the various classes of disease. This is the more strictly ratiocinative part of your duty, and which promises the richest rewards. In every other way, likewise, diligently endeavour to fit yourselves to undertake the responsibilities of independent charge of patients by constant attendance in the wards.

Admitted as practitioners, you at once become sharers in a noble heritage bequeathed by your predecessors. But the estate inherited is not to be misused and squandered; its jewels are not to be scattered broadcast; its mansions are not to be despoiled. No, your inheritance must be handed down to your successors, not only unimpaired, but improved. You must strive to cultivate its waste lands; increase its treasures; add yet stately towers to its time-honoured fabric. It is the permanence of your usefulness that will confer real dignity on your profession. You must endeavour to discover that which shall permanently benefit suffering humanity, and the discovery you shall give ungrudgingly. It is the abstract, open-handed benevolence of the ideal medical man that gives dignity to the whole profession. Millions of money gained by a secret remedy would confer no dignity on the possessor thereof. What would Jenner's fame now be had he kept his immortal discovery — "the greatest physical good even yet given by science to the world"—a secret for his own pecuniary gain? It is the sentiment with which a benefit is conferred that in a great measure determines its value; and while we all strive to the best of our ability for the advancement of medical knowledge, let us ever bear in mind the glorious declaration of Hippocrates: "My sole end shall be to relieve and cure my patients, to render myself worthy of their confidence, and not to expose myself even to the suspicion of having abused this influence. ..... To whatever dwelling I may be called, I shall cross its threshold with the sole view of succouring the sick, abstaining from all injurious views and corruption."

The profession has its enemies, against which it will be your duty to keep watch. Mammon is one of its foes; quackery another. The more greedy gatherer of fees by his mephitic influence does incalculable harm to the profession to which he claims to belong, but in the dignity of which he can bear no part. Quackery has ever been on the alert to injure the true physician, not only that form of quackery that seeks with unclean hands to filch from the ignorant and credulous by clumsy devices, but quackery within the ranks of the profession. The fortress is often in more danger from the traitor within its walls than from the avowed assailants.

In the practice of the medical profession one must never let disappointment at the ingratitude of patients influence our conduct. The selfishness and forgetfulness occasionally met with after the patient has been restored to health will assuredly try your belief in right, and in the maxim that "Honesty is the best policy."

There is no single function of a medical practitioner that is otherwise than honourable. It may be truly said of the profession that it "knows nothing base, dreads nothing known." Whether with his own hand the practitioner carefully graduates the dose of sedative that may give ease to the tortured, or convert the ravings of the delirious into calm slumber,—whether he stand at the bedside, as sentinel, to guard against contingent dangers woman in her hour of trouble, that she may say when peril is over, "He turned my fears to hope, my sorrows into joys," or whether with skilful hand he lifts the dark curtain of continual night from before the eye of the cataractous, he is alike occupied as no one need be ashamed to be.

Some have falsely concluded, since men with ample fortunes do not enter the medical profession as they do the legal, military, and naval professions, that the medical profession is less the occupation for a gentleman than the others just named. The real and true explanation is, that natural instinct and common sense plainly say that the miseries and sufferings of our fellow-creatures are not to be made a pastime of. Surely the profession has a pedigree sufficiently old to satisfy the most punctilious. It is one that can find employment for powers however great, and present problems difficult enough to make the most self-confident hesitate. Do you love generalization? there are ample data to be reasoned upon. Are you curious, and seeking to "peep into the birth of things"? there are details to be worked out. Are you bold? opportunities will not be wanting to test your nerve. Are you combative? there stands the old enemy, "the scythe man;" you will find his thrust difficult to parry.

Then, again, see how the science of Medicine is gradually spreading out its roots, so as to assume an administrative importance. How steadily "State Medicine" is advancing! The revelations lately made in sanitary matters, especially connected with the public services, will tend to put the physician in his proper place. The evidence of Sir Ranald Martin and others on the subject of the health of troops shows that the tenure of our Indian possessions will depend more on the skill of our physicians than on the strategy of our generals.

I am far from undervaluing those worldly advantages and distinctions that men so ardently pursue, offered by other callings in life. But I earnestly trust that, having once entered the medical profession, you may never harbour for a moment a thought of distrust of it. Some of you whom I now address as students will assuredly attain to the highest honours accorded to our profession; but all of you, by a diligent and honest discharge of your duty, may carry with you a consciousness of having alleviated human suffering, and of having lightened the ills of life, which to have "'twere sweeter than to wear what kings bestow."

ST. THOMAS'S HOSPITAL.

INTRODUCTORY LECTURE BY MR. SYDNEY JONES.

THE lecturer began by addressing the various classes of auditors—pupils, old students, practitioners, lay friends, and governors—who honoured the occasion by their presence. He expressed the gratification with which he saw so many of the latter present, joining in giving a welcome to those who were about for a time to make the hospital their home—testifying their interest in the profession, and their grateful sense of services rendered, and appreciation of the beneficent activity

which they had probably personally and through their friends keenly felt. "It is," said he, "too commonly true that

> 'God and the doctor we alike adore,
> But only when in danger, not before.
> The danger o'er both are alike requited;
> God is forgotten, and the doctor slighted.'

We feel confident, however, that your appreciation of the services of the medical profession extends further than this." Addressing himself then especially to the students entering for the first time, he urged them to consider well the important step which they were about to take, and to bear in mind that the profession involved inconveniences, disagreeables, and self-denial. It possessed no bishopric, dukedom, or chancellorship; but, conscientiously followed, it would secure respect, esteem, and good will, and would afford pleasures hardly possible to define—pleasures which a delicate and sensitive mind enjoys in the discharge of duty and in the cause of beneficence. The future was, however, full of hope; and it was to be anticipated that the honour and estimation of medical men would steadily increase.

Mr. Jones then passed in review the various subjects which form the necessary curriculum of study, and laid down in detail rules for guidance in cultivating their acquisition. He dwelt especially upon the importance of practical clinical study, and attention to pathological details; and gave advice as to note-taking.

"Those of you now entering the profession have very considerable advantages over those who entered only a few years back, in having improved means at your command for the study and treatment of disease. The stethoscope, microscope, ophthalmoscope, and laryngoscope constitute an array which might indeed form matter of wonder to our ancestors; although some of them would, perhaps, with the prejudice which certain men have to innovation, characterize the whole as lumber, or apply other ignominious terms to some of those instruments which now yield us such essential service. I have not unfrequently heard such terms applied, but at the same time have observed that those applying them have not been above looking for aid from those instruments—evidently not quite certain as to their uselessness. They may afford you very valuable aid; but mind, you are to use them as aids, and not as substitutes for other knowledge. The ophthalmoscope and laryngoscope have been the most recently introduced, and are likely to effect a considerable revolution in the treatment of diseases of the eye and throat. Look over the specimens of laryngeal disease contained in our museum and those of other hospitals, and you will find many cases where, without doubt, cures might have been effected had the means of diagnosis now at our command been made use of. And taking diseases of the eye, what a new era presents itself in their treatment! Not a long while since the posterior part of the lens formed the boundary between a known region in front and an unknown region behind. Very many diseases affecting this unknown region used to be classed under the head of Amaurosis—a disease described by Walther as 'one in which the patient sees nothing, and the physician nothing;' and the poor patients who suffered from dimness of vision the cause of which was not immediately recognizable were almost necessarily salivated. But now, taking a number of patients with the same symptoms of impaired vision, you may with the ophthalmoscope discover in one an abnormal patch of pigment; in another, the retina overspread with blood; in a third, atrophy of the optic nerve; and in a fourth, separation by blood or serum of the retina and choroid. The ophthalmoscope not only forms a material aid in our diagnosis, but has certainly played a most important part in doing away with the indiscriminate administration of mercury formerly had recourse to.

"Do you who are about to become students wish to know some more of the attractions of our profession? Do you who are governors want to know why your interest should be excited in institutions such as ours? You should have seen, a few weeks back, that young girl the subject of dropsy—emaciated—her very life-blood ebbing fast into the tumour to which she seemed about to fall a victim. How haggard she looks! and what anxiety is depicted in her countenance! for she has heard something of the seriousness and hopelessness of cases such as hers. A few years back she would have been left to die, or at best, perhaps, would have been relieved of the accumulated fluid, but only to allow the draining of her already starved system to be carried to still greater lengths. The accumulated stores of what should have served her as nourishment, but now morbidly directed, would have been again and again drawn off, until at last nature, unable to keep pace any longer with the demand, would, after a brave and prolonged struggle, have been obliged to yield. Such would have been the history of this poor girl's case not a long while back; but with the improved knowledge and means now at command, a better prospect was in store for her. Her tumour, of enormous size, was removed. Having no longer any drain upon her system she rapidly gained flesh and blood; her spirits and prospects brightened; and she left the hospital perfectly cured, her face beaming with gratitude and delight at having been rescued from a premature and lingering death.

"Look at that poor child. She has been only a few hours ill. 'Twas only yesterday she was enjoying her innocent gambols, free from care and trouble, and delighting her parents with the joyous prattle of her tongue, and frequently taxing their utmost powers to enable them to answer the multitude of questions so rapidly revolving in her mind. But see her now! The poor little thing lies helpless in her couch, disinclined to be roused, either for the sustenance which is necessary, or to afford pleasure to those by whom she is so dearly loved. She is inclined to doze, but cannot sleep on account of the impairment of her breathing. See her tossing her head from side to side! see her every muscle straining itself to the utmost! She would, if she could, tear her very neck asunder, in order to obtain the air she is labouring for but cannot get. The surgeon now steps in, and by the exercise of his art introduces air below the obstruction. The face becomes pallid, the breathing altered from the laboured to the inaudible; and the child, exhausted by its labours and relieved of its tortures, falls asleep, even before the details of the operation are completed. She now lives, a joy to her parents, and a living monument of God's mercy in answering the prayers which were offered up on her behalf.

"Say, does not the prospect of being enabled to afford such relief offer you some inducement to join us? Will it not do your very hearts good to see an end put to suffering of such intensity? Will it yield you no delight to see the gratitude of that mother whose child you have been the means of restoring to her? Gentlemen, no pecuniary compensation can offer you satisfaction such as this. Although, in giving these illustrations, I have selected surgical rather than medical cases, you are not to suppose that there are not equally abundant attractions in medicine. In this branch also you will find plenty of inducement to work at and love your profession, plenty of opportunities of effecting cures and of gaining the confidence and gratitude of your patients.

"And now, gentlemen, let me urge upon you the importance of entering your profession not only with a determination to work and make the fullest use of whatever talents you possess, but with a full desire to practise it with uprightness and with strict regard to the highest moral principle. A character for morality and good principle is not only of incalculable value to you as gentlemen, but is of primary and essential importance to you as medical practitioners. Your actions will be always exposed to the severest scrutiny; and should the breath of calumny ever alight with any appearance of truth upon your path, be assured that your reputation will be destroyed and your progress through life impeded. You who are now about to leave your homes for the first time, let loose upon London life, left to your own resources, without parent or it may be friend to guide you, will necessarily be exposed to many temptations, and will have to seek for more than human assistance to deliver you from evil. Be especially upon your guard against listening to the first allurements of folly and vice; prepare yourselves to be proof against these at the first onset; for you will find this a very much more easy task than to have subsequently to eradicate bad habits which have become firmly rooted. It is possible that, if, in your walk through life, you meet with success, there will be some to whom you will become an object of envy, not merely concealed, but, it may be, openly expressed. Now if you are wise you will take no more notice of it than the moon does of the howling of the dogs: you will say nothing, but shine on.

"There are two other points to which I must very briefly allude before concluding. The first is the much mooted question of vivisection, to which I refer only to express the indignation which must be felt in the mind of every Englishman at the atrocious cruelties which have been perpetrated in some of the Veterinary Colleges on the Continent. Although it is not necessary for us to use the same consideration as the Turks, who think it a sin to kill a dog, have hospitals for superannuated cats, and do not venture to destroy even their vermin, but put them tenderly on the ground to be received into the clothes of the next passer-by—yet all well-directed minds must recoil from inflicting any unnecessary cruelty. Surely it is not necessary, in order for students to become adept operators, that these operations should be performed on living animals; nor

does it seem justifiable that experiments should be carried on simply for the purposes of demonstration—of impressing more vividly upon the mind certain physiological truths. But altogether to discountenance vivisection is quite out of the question; for it has already done much, and promises to do more, towards the alleviation of the sufferings of mankind and the elucidation of some of the mysteries of our science."

Mr. Jones then congratulated the well-wishers of St. Thomas's on the acquisition of a permanent site for the hospital at Stangate, which he considered a very desirable selection. "During the past year," he said, "the funds of the institution, although necessarily not so available as might have been the case had we retained our old site, have nevertheless, so far as circumstances have permitted, been well applied. To the treasurer and governors great credit is due for having made much of what must be at most only a temporary hospital, and which can never yield, either to the public or to the medical profession, those advantages which its means are qualified and bound to afford. Having had much to do with the out-patients of this and the old hospital, I can state what can be borne out by my colleagues in this department. The out-patients relieved here may altogether equal in number those relieved at the old hospital. But, taking the male applicants, there is a sad deficiency in number and quality of cases. The cases for treatment are, as a rule, not urgent ones; a large proportion consists of the refuse of other hospitals, and would in our old hospital have been treated, without letters, in the casualty department; and as to the female applicants, who are more numerous, a large proportion is made up of the better classes, and not the poor, for whom the hospital is intended. Stangate occupies a position corresponding pretty accurately with that which we have lost, and presents advantages not afforded by any other site which has been discussed. Our hospital should be in a densely populated neighbourhood, of ready access to the masses, in proximity to factories and accident-making districts, and readily approachable by leading thoroughfares. The few nuisances enumerated as at present existing near our proposed site are remediable ones: the gas-works have a limited term of existence; nuisances from factories we are furnished with full powers to abate; and we ought reasonably to expect, from the immense amount of treasure now being expended on the drainage of London, that the river will be comparatively pure. I consider that at Stangate we ought to have an hospital that will rival in appearance and appliances any hospital not only in London but in Europe; and that the opportunities of supplying the needs of the poor will be immense—perhaps not to be equalled, and certainly not to be surpassed, in any other district of London. These opportunities will be available not only to a large portion of the poor of Southwark, but to the densely populated districts of Lambeth, and to the western half of South London generally.

"And now, ladies and gentlemen, I thank you most heartily for the forbearance you have extended to me; but, in conclusion, wish to say just one word more to the students of this hospital. Endeavour, gentlemen, so to live as to be enabled, when old age has crept upon you, to recur with satisfaction to the events of your past life, and enjoy the pleasing reflection that in all your doings your object has been to walk in the path of duty; so that when your time of sojourn here is about to cease, you may look forward to another more lasting inheritance—to one that is eternal, and that fadeth not away."

WESTMINSTER HOSPITAL.

INTRODUCTORY LECTURE BY MR. CHRISTOPHER HEATH.

THE lecturer began by saying that his lecture was addressed emphatically to students, and not to his colleagues or the medical friends he was glad to see around him, because he felt that from his long connexion with students he might venture to offer a few words of advice which might be useful to them. Few men, he thought, entered at a medical school without some previous experience in the form of apprenticeship, which he believed to be fraught with much benefit when pursued under the tutelage of an able practitioner; but at the same time he considered that preliminary general study was essential for a medical student, and therefore congratulated new students on having passed a preliminary general examination. Those who had already seen a considerable amount of general practice were warned, moreover, not to neglect their practical studies, since different methods of treatment might be witnessed at an hospital, and on different classes of patients from those they were previously acquainted with. The lecturer maintained that the student could not keep too constantly in mind that the object of all his studies was to fit him to become a practitioner; and therefore that, though it was essential that the student should pass certain examinations in order to obtain his diploma, he should rather strive to cultivate a knowledge of the symptoms and treatment of disease combined with tact and common sense. It must be allowed that individuals differed in capacity, but there was nothing in medical studies so difficult that ordinary ability, combined with diligence, could not overcome. Real genius was a rare and perhaps dangerous possession if its possessor was led to believe that he could dispense with hard work, and as Buffon said, "Invention depends on patience."

In alluding to the subjects of study of the first-year's man, Mr. Heath took occasion to make some remarks respecting anatomical study as pursued in the present day, and believed that, though medical men might venture now-a-days to accept many statements without actually proving them themselves, yet that the occurrences of every-day medical life necessitated an acquaintance with surgical anatomy. He thought that anatomists were to blame for having overloaded their science with minutiæ, for having separated into distinct systems the parts composing the one perfect body, and for having kept asunder far too widely surgical and anatomical relations. The student was reminded that the creature he would have to treat in disease would be a man whom he would not be able to dissect literally to find out the malady; but would have, as it were, to pierce the tissues with his mental eye, and discover the secret mischief by his cultivated senses. External form and general physiognomy both in health and disease were also urged upon the student's attention, and the necessity for the operating surgeon being a thorough anatomist, by reference to the examples of Astley Cooper, Liston, and Fergusson. The lecturer earnestly deprecated the tendency to avoid responsibility, which he believed to be prevalent; and thought that the "official fear of incurring responsibility," as Kinglake termed it, had invaded not only the army and navy, but to some extent the medical profession also. A *proper* feeling of responsibility regarding the life and death of patients was to be looked for in every medical man, and everyone must feel it deeply at first; but the young practitioner was exhorted not to be overwhelmed when the results of treatment proved unfortunate. "But," continued the lecturer, "if thoughts like those I have alluded to are apt to arise in the treatment of ordinary cases, what must be the feeling of the surgeon when about to commence a serious and complicated operation! Much to be pitied indeed is the man upon whose shoulders this great weight of responsibility rests, if he feel himself unworthy of it, or if his mind revert to opportunities neglected and instruction despised; and therefore it is that I so strongly urge upon you the necessity for thorough acquaintance with anatomy, and for constant attendance in the wards and in the operating theatre. And yet the most accomplished anatomist, the most skilful surgeon, cannot command success; a Higher Power than that of human hands alone can govern all results, and we must be content to bow before Him."

With regard to lectures and hospital practice, Mr. Heath said that he did not ask the student, as was often absurdly done, to "live in the wards," because he knew that his time would be fully taken up with lectures, &c., except for two hours in the middle of the day, which hours should be devoted regularly to the wards or the out-patient rooms of the hospital. Nothing gives a better stimulus to the energies of medical officers in the care of their patients than the presence of students, and he therefore believed it to be the very best policy of governors of hospitals to foster the medical schools attached to them. The offices of clinical clerk and surgical dresser were pressed upon the student's notice as giving the very best opportunities for acquaintance with practice, and allusion was made to the new regulations of the College of Surgeons, requiring certificates of such appointments. Attendance upon post-mortem examinations was also shown to be requisite, since any practitioner might be called upon to decide as to the cause of a sudden death, and his evidence might involve the lives and liberty of his fellow subjects.

The lecturer then proceeded to speak of the rewards which were open to the student during his studies, and said that class-prizes had always a tendency to induce the pursuit of one branch of study to the exclusion of others, and cautioned his hearers against this error, whilst exhorting them to compete for the numerous prizes offered them. He alluded also to the valuable prizes founded by Mrs. Chadwick, the conditions of which guarded against the error he had mentioned, since they

were awarded for general proficiency. The most valuable prizes offered to the students of the Westminster Hospital were the offices of house-physician, house-surgeon, and assistant house-surgeon, which were thrown open to all without fee, and the lecturer spoke in the warmest terms of his recollections of the tenure of similar offices by himself.

Mr. Heath next proceeded to address individually the three great classes of medical students. "To the student who is soon about to enter upon practice I would say—Do not imagine that you have completed your studies because your three or four years here have expired. Ripe experience is necessary for your perfection; therefore, observe diligently, record carefully, study constantly—study not merely books but men, and not merely men in disease, but men in health, and in their social relations, that you may be prepared to take that high position which, as successful practitioners of a noble art, you will be justly entitled to." The second year's man was urged to concentrate his energies on the business of his education; to make up for all past deficiencies, and to study to gain knowledge, and not merely to pass examinations; whilst the freshman was warned not to let his inexperience lead him into difficulties, and was told not to imagine that the first year could be wasted with impunity, since each year had its allotted amount of study. Relaxation from study was shown to be occasionally necessary for the most diligent, but care in the choice of companions and amusements was inculcated. Amusements, if used rightly, rendered the student more capable of subsequent work, but not if they were allowed to interfere with necessary rest, or the labours of the following day, whilst the choice of them must depend on each individual's gentlemanly tastes. Whilst disclaiming any wish to sermonize, Mr. Heath protested against the notion that it was necessary for a young man to "sow his wild oats," and in support of his views quoted a passage from Mr. T. Hughes' "Tom Brown at Oxford," and concluded his lecture as follows:—

"And now, gentlemen, in conclusion, let me beg of you all to be in good heart as regards your studies and your future career. We all, I suppose, at one time or another, feel inclined to despond and look at the black side of things; but depend upon it he who does so least is at once the happiest and most successful man. If the student allow himself to become despondent in his early studies, how will he ever overcome the still greater obstacles which await him? If the more advanced student shirks his first examinations, how will he ever become a practitioner? But it is as practitioners, perhaps, that this 'equal mind' will be most necessary for you, since it may affect not merely your own, but your patients' welfare. The man who is over-anxious unnerves himself in some degree, and is thus less fitted to take that calm view of his own affairs, or of those of others, which will be most conducive to a good result; and, therefore, I say again, be of good heart, not forgetting, however, to put your trust in Him who 'ruleth all things.'"

After the lecture, the board-room of the hospital was thrown open for a conversazione, where a large display of microscopes, instruments, and scientific appliances was prepared for the entertainment of the numerous visitors. Amongst other interesting exhibitions, Dr. Gibb demonstrated the use of the laryngoscope; Dr. Radcliffe exhibited some most interesting electrical experiments, and Mr. Brooke explained, experimentally, the telegraphic apparatus communicating between the hospital and his residence. Tea and coffee were served to the company, which did not separate till a late hour.

CASES OF VENEREAL DISEASE (GONORRHŒA AND SYPHILIS) TREATED IN THE HOSPITALS OF LONDON ON MONDAY, 21ST SEPTEMBER, 1863.

THE following return of cases of venereal disease treated at the larger metropolitan hospitals only in one day, is interesting as presenting a view, however partial and imperfect, of the extent to which gonorrhœa and syphilis affect the civil population under the present system of general licence and toleration:—

	In-door.			Out-door.			
	Males.	Females.	Total.	Males.	Females.	Total.	Grand Total.
St. Bartholomew's	10	34	44	117	31	148	192
Guy's	23	14	37	76	40	116	153
St. Thomas's	0	0	0	42	0	42	42
King's College	2	0	2	48	16	64	66
Westminster	6	6	12	6	12	18	30
University College	6	0	6	14	0	14	20
Middlesex	10	7	17	8	16	24	41
St. Mary's	6	5	11	12	8	20	31
London	9	4	13	6	3	9	22
Charing-cross	0	0	0	17	11	28	28
Royal Free	3	11	14	132	76	208	222
St. George's	6	1	7	0	40	40	47
West London	0	0	0	4	2	6	6
Metropolitan Free	1	0	1	21	6	27	28
Lock Hospital, Dean-street	12	0	12	202	0	202	214
Lock Hospital, Harrow-road	0	28	28	0	0	0	28
	94	110	204	705	261	966	1170

OBSERVATIONS.

At St. Bartholomew's Hospital, the male venereal ward is now empty, being under repair. The female venereal wards have 20 beds vacant, owing to an outbreak of scarlatina. These wards are usually full.

At Guy's, the female venereal ward has just been re-opened, and has accommodation for 25.

At St. Thomas's, on Mondays the male out-patients only are seen. No female cases are therefore included in the return sent. There is also a special day for skin cases.

At the Westminster, the average number of out-patients is usually about 40; the return gives but 18.

At St. Mary's, the number of out-door cases was very much less than usual.

At the Charing-cross, venereal cases are not admitted into the wards.

At the Royal Free, there is a ward for females, with 26 beds; but 11 only are occupied, in consequence of some repairs going on. There is no special ward for males, and only severe cases amongst them are admitted.

The return from St. George's is small, partly on account of alterations taking place in the wards, and partly because females only are seen as out patients on Mondays.

At the West London, venereal cases are at all times few.

At the Male Lock Hospital in Dean-street, the number is rather below the average. No women are seen on Mondays, but they average about 60. At the Lock Hospital in the Harrow-road, female in-patients only are seen.

We must acknowledge the kindness and courtesy of all the house-surgeons and other gentlemen who gave their valuable assistance in obtaining this return.

THE LANCET.

LONDON: SATURDAY, OCTOBER 3, 1863.

THE opening of the Winter Session is always a great fact at the Medical Schools; and although its annual recurrence may be expected to take something from the excitement of the occasion, yet it can subtract little from the interest. For every year the relative entries tell the lecturers how their school stands in professional estimation; and as every capable teacher makes more or less a follower and admirer of his pupil, so each expects to find in the constant succession of pupils, friends and supporters hereafter. Then there is the delight of teaching clever lads, and the misery of instructing stupid and perverse ones; the pleasure of seeing the benches filled with orderly, attentive, and thoughtful faces, and the annoyance of a class inoculated with disorder by a few *mauvais sujets*. Just now the lecturers ask each other every time they meet, "How many entries?" and the "Dean" asks each of his colleagues whether he has "heard of anybody." Former *alumni*, making their appearance with obvious neophytes in hand, are welcomed with cordiality; and during the present week the most sour faces are bland, and most addresses cordial. For it is natural that while the large body of indecisives are hovering about, who put off their "entry" until they have looked around them and made their selection, any trifling asperities should be as far as possible smoothed away. The little stir and bustle which makes itself felt in the theatre of every school and the vestibule of the hospital, extends widely through the profession. Those who have sons to place in the career which they have themselves followed, start them not without anxiety in a pursuit full of cares and difficulties, with many absolute blanks, and without any great prizes. But after all, if a man have the makings of a gentleman in him, he can hardly fail to become a gentleman when he becomes a doctor. There is a competence for nearly all, a living for quite all who are not disabled by sickness or bad conduct, and fortunes for a few. As a study, Medicine offers everything which can satisfy the head and the heart, and is altogether beyond compare with that of any other learned profession. Unlike trade, it requires no large capital to start a lad fairly in Medicine. A good preliminary education, sound principles, tolerable intelligence, and a very few hundreds, will start a young man well on his way in the medical world; and those who have begun lowest have often ended highest. Even Court appointments are no longer the appanage of any particular hospital or clique, but have been for some years bestowed with a wisdom and an impartiality which are encouraging to all who aspire only to win what they deserve. Hence many a practitioner of medicine, although his own bed has not through life been one of roses, and such as it was he has been called from it grumblingly and with scant recompense on many a cold night—although he has fought, and is perhaps still fighting, a hard battle to fulfil his most cherished projects, yet, deliberately weighing the advantages and disadvantages of the career which he has himself chosen, now sends forth his son in the same path.

Many a reader will offer up a fervent prayer that the good advice given in the Introductory Lectures reported in our columns to-day may be taken to heart by some Absalom who sits now for the first time on benches long since familiar to himself. All will sympathize in some degree with the feelings of hope and doubt which stir in so many minds at this time, and wish good fruit from the seed which the lecturers so actively sow. Each takes his own view of the business of the session, but all are impressed with a sense of the importance of the occasion; some seem even oppressed, and one or two enthusiastic. Mr. MAUNDER considers the day "to be of peculiar interest;" and Mr. NUNN feels the responsibility greater because "at no epoch in the history of Medicine have the times been more pregnant with events affecting the interests of the medical profession." Certainly on no occasion do we remember a more practical and excellent series of Introductory Addresses to have been delivered. That of Dr. RUSSELL REYNOLDS, which we print *in extenso*, shows unusual power in a direction rarely given to a lecture of the kind, but which produces the happiest effect. That of Mr. PAGET, which was given *impromptu*, was a noble oration, which we reserve for the honours of full publication next week.

ONE hundred years ago, in the year of grace 1762, ANNE PARSONS lived in Cock-lane. She was a young lady of lively imagination, who knew a Ghost. The sober citizens of London believed in her. The great lexicographer visited her. Knockings and scratchings failed to satisfy his sceptical mind. Her little game was soon played out when precautionary measures against imposition were adopted. Since then we have rarely heard of the supernatural. Occasionally a vagrant spirit has turned up, who, "doomed to walk this earth," looked in on its inhabitants as a friend, and behaved like a gentleman, causing little inconvenience to his acquaintances—usually some elderly party with a profound knowledge of the art or mystery of cup-tossing, and a predilection for waters strong. Within the last few years, however, a disposition has declared itself on the part of many factious spirits to depart from that sobriety of conduct which had for such a length of time characterized them. We now hear of aërial beings indulging in all sorts of quaint humours: pulling and pinching the elderly and matter-of-fact who are stout in body, and manifesting themselves plainly but partially to the young and sensitive who are "all soul." We confess to having attended an evening party to which many of these wandering sprites were invited, and certainly a more disorderly or unmannerly set we never were in company with. They broke the furniture, made a great disturbance, and told no end of lies. We thus expressed ourselves, and they were offended at our doing them such violence, and were, doubtless, also so ashamed of themselves that they refused to be visible; at least we arrived at the latter conclusion, having been informed of the first reason for their non-appearance by the buxom "medium," who smiled on our half-crowns with a sense of enjoyment which savoured strongly of this earth. Why it is that old tables and chairs should possess special attractions for the souls of the departed, we have been unable to discover. Our inability to do so is no argument against the good taste which influences such a choice, and we desire to protest against it being accepted as such, at least until our manuscript shall have been concluded and we are safe from the vengeance of the mahogany at which we write. Perhaps some fine moonlight night we may be invited to the "Ghost Club," and have

a quiet, confidential chat upon the matter; if so, we pledge ourselves to perfect secrecy, provided we meet with an "honest ghost"—an "honest ghost," such as that of the Majesty of Denmark, whom we once saw in the provinces, if not on a bier of state, certainly in a state of beer. Alas, that we should have to write it—the age of mystery is past! Where is now the poetry of youth and the dread apprehensions of Old Bogey? Gone, never to return! Real ghosts may be seen by the dozen; things of air that are not "creations of the heat-oppressed brain," but *bonâ fide*, veritable articles, made to order and ready when required. Shame on Science for thus destroying Romance! Who is PEPPER, that he should be permitted to live? We have heard of men "who would sell their souls for money," but never before of one who would exhibit his ghost; and yet this is the case! PEPPER began it. He has the hardihood to declare that he did, and to appeal to the law for protection. The Lord Chancellor is presumed to be the keeper of the conscience of the QUEEN. His jurisdiction is now extended. The ghosts of her subjects must henceforth be under his protection: not such ghosts as those of which we have read "animula vagula, blandula," like that of her frolicsome Grace, FITZ-FULKE, but things of air, described in provisional specification, and secured by patent. Facts are stubborn things. Who henceforth will deny that those strange matters which at present surpass our comprehension philosophy may yet find out? As science advances, the mysterious recedes; as the true stands proclaimed, the false becomes exposed. Charlatanry and humbug are the shackles which bind weak and credulous minds; the strong hand of practical experiment has been shown to be sufficiently powerful for their release. Prof. PEPPER is deserving of support. Admit, for the sake of argument, that his invention in its principle is not new, though such high authorities as Sir DAVID BREWSTER and Professor WHEATSTONE negative such an assumption, is he not yet entitled to all the advantages derivable from giving a practical reality to that which had for years been permitted to remain merely as a scientific curiosity? It may be, as the Lord Chancellor observed, that fifty-five years ago BELZONI astonished his boyish mind by a like exhibition. Does this detract from the claims of one who has afforded to the public instruction and amusement by calling the ghost from its half-century of rest? We affirm that it does not, and we rejoice to find that the Lord Chancellor has not allowed technical objections to be made the basis of substantial wrong. In that half-century what mighty results have been achieved by men of science giving practical operation to the suggestions of philosophy or the accidents of discovery! When experiment schools the judgment, and use exposes the faults of any application of science, substantial benefit to the community at large is sure to follow. It would be most interesting to trace the steps by which the grandest triumphs of the intellect have been perfected. It would be found that from exhibitions scarcely more important than that of "the ghost," material good has resulted. It is impossible in the present day to say that substantial benefit may not rest in the principle which at present merely affords surprise and amusement to the million. Now, when a love of art, and its appreciation, form part of our national disposition and education, photographic and stereoscopic exhibitions and pictures are the source of infinite enjoyment, and also, we will add, of valuable instruction. It may not be too much to anticipate that the ingenuity which has accomplished so much may progress still further, and that the "PEPPER Ghost" will form, as it were, the starting point in a series of practical results, not without substantial use and value. Perhaps not the least important influence which it may exercise will consist in the dissipation of those delusions which have hitherto existed in reference to the supernatural. Once inform the public, and let it be understood, that appearances are capable of being produced of the character nightly exhibited, and there is an end of the mysterious. Never was such knowledge more *apropos*. We have recently had melancholy illustrations of the weakness and credulity which exist on the part of many, rendering them liable to every possible imposition. The "Crystal Globe" was not without its believers. They were not uneducated. We have heard from reliable authority that a belief in the power of divination extensively prevails amongst many occupying positions which ought to argue the possession of something like common sense. We have had many examples of the facility with which imposture is practised, and weak minds rendered most miserable through their belief in revelations from magic mirrors and vaticinations of sturdy impostors. Natural magic has too frequently been made to accomplish most unnatural results. It will be well that all who are credulous see the ghost. They will find it to be not unworthy of their study. Those who can appreciate the curious and interesting results of mechanical combinations in the production of optical illusions may be rendered wiser for their just estimate of modern soothsaying; while the best-gifted can see for one shilling appearances which far surpass even GILES SCROGGINS' ghost, when that worthy's perturbed spirit was abroad. In this way Mr. PEPPER, without anticipating so serious an office, may become an important public instructor. He may do more. By awakening the spirit of inquiry which his exhibition is well calculated to arouse, he may direct the public mind to that which is fast becoming the great question of the day—the rendering science more generally and practically available. For these reasons we are glad that the Lord Chancellor has given him ostensible protection in his application of science for the purposes of his exhibition: though perhaps it is the strongest application ever yet made to put a ghost into Chancery; for we have heard profane people affirm that to get into Chancery was the shortest and surest method of leaving the applicant without even the ghost of a shilling.

Medical Annotations.

"Ne quid nimis."

CLINICAL CHARACTERS OF THE MEDICAL STUDENT.

Quæ fuerant vitia mores sunt. It is our pride to reverse the lament of the old Roman philosopher, and to declare that part of what were once the manners of the medical student would now be held as unpardonable faults. The student of this day is undoubtedly more polished, decorous, and well-conducted than in bygone days. He has moved with the times, and the eccentricities which were formerly his badge would now bring a flush of shame to his face. Not that we can hope ever to see a more noble, tender-hearted, and earnest band of students arise than those who have during the first half of this century

been educated at our schools, of whom Dr. Priestley well said last year, looking at their self-sacrifice and tenderness, their devotion to the cause of the poor, the sick, and the helpless: "Rough diamonds they may have been, but jewels they were nevertheless." The physiology of the medical student of twenty years since differs widely from that of our modern race, although retaining enough of general consonance to show that the outer manifestation rather than the inner impulse has changed. The admirable sketch which Dr. Russell Reynolds gives, in his introductory lecture at University College, of some of the varieties of the student, irresistibly recalls the earlier limnings of one who twenty years since anatomized, with less serious purpose, and with kindly although humorous exaggeration, their corresponding types in his day. We are reminded by Vane Velox of the once celebrated London Medical Student, whose first day's work in the lecture-room left him with a confused dream at night that the air-pump in the laboratory was giving a party, at which various scalpels, bits of gums, wax models, tourniquets, and fœtal skulls assisted as guests; whose notes were at first taken at each lecture, but whose lectures became fewer, and the notes left in the rough, and interspersed with a large proportion of portraits of the lecturer and other humorous conceits; and as he really had put down his name for heads or necks or pelvic viscera, in the early belief that "dissection is the sheet-anchor of safety at the College," became a trafficker in human flesh, and disposed of them at a discount to some man on the point of going up. Mr. Vane Velox's pastime of making notes and illustrations with his penknife on the surface of the benches is certainly an hereditary taste derived from his predecessor, whose inventive faculties were shown by "various diverting objects and allusions cut with his knife upon the ledge before him in the lecture-room, whereon the new men rest their note-books and the old ones go to sleep. So that in vain do the directors of the school order the ledge to be coated with paint and sand mixed together: nothing is proof against his knife; were it adamant, he would cut his name upon it." Their career, too, ends identically, with the aid of "one of those rotatory machines which must be nameless." There the former aspirant would strive to fill his head with "catch-questions" and mnemonic verses; would form an acrostic of the first letters of the elements of compound gamboge pill; and would learn that he would be expected to tell the examiners at the Hall that, if called in to a person poisoned by oxalic acid, he would scrape the ceiling with a fire-shovel, and use the plaster containing lime as an antidote. "They like you to say you would scrape the ceiling at the Hall; they think it shows a ready invention in emergency." The Hall is no longer the Hall of our ancestors; the examiners are no longer so easily satisfied—if indeed they ever were; and the humorous exaggerations which were recognised as presenting some portraits to the life are now but sorry caricatures in most of their details.

Dr. Reynolds draws up his cases with the fidelity of a keen though kindly observer; hits off to a hair the follies, the merits, and the shortcomings of Vane Velox, Superficialis Hurry, and Chemicus Profundus; and presents us with a likeness, affectionately finished, of the brothers Orbicularis and Longitudinalis Goodman, who are the flower of the school, and destined to become ornaments of their profession. We very heartily commend to the students, both new and old, of the metropolitan and provincial schools, the clever, amusing, and wise homily which Dr. Reynolds has drawn from the stores of his experience and observation. The types may be recognised in all the schools; and rarely will any body of pupils be so limited in number or in variety of character as not to present individuals who will be supposed to have sat for their *carte* to the Clinical Professor of University College Hospital. It is especially to be hoped, however, that each man will think rather of comparing himself with these typical examples than of finding likenesses amongst his fellows. *E cœlo descendit, γνῶθι σεαυτον!*

FEDERAL FOUL BLOWS.

EUROPE regards with mixed feelings of horror and wonder that devastating fratricidal war which has raged so long and so fiercely in the great continent of the West. There, from day to day, deeds are done in real life as fearful as those which Shakspeare drew in the Third Part of "Henry the Sixth." We shudder to hear how near kindred are fighting with all the dire ferocity of "love to hatred turned."

> "Make war upon themselves, brother to brother,
> Blood to blood, self against self."

It is an awful story; and the more terrible in that this war seems to be dragging within its vortex, and destroying, all those decent considerations which distinguish civilized war from the gloating blood-thirstiness of the vindictive savage; at least so far as concerns one of the contending parties. We acquiesce in the propriety of that absolute neutrality enjoined on the people of this country. But Humanity is of no party, and we have a right to protest in its name against a series of outrages which have been recently committed by the Federal authorities on members of the medical profession peaceably pursuing their vocation, and carrying on their practices just as they did in time of peace.

However fiercely war might rage between civilized nations, it has been accepted as an inviolable rule that respect shall be shown to the aged and imbecile, to all sick persons and young children. To deprive such as these of the services of the physician, to bid him sit idle whilst sufferers are crying for the relief which he yearns to give them, and to do all this with only a political excuse, is nothing but a coarse and brutal method of gratifying a mean and malignant spite. We have had many wars in all parts of the world, "quæ caret ora cruore nostro;" but, thank Heaven! our arms have never been disgraced by such cold-blooded cruelty.

A correspondent, on whose account we can place perfect reliance, thus writes from Norfolk, the seaport town of Virginia, which has been taken possession of by the Federal Army:—

"The order issued is that no physician shall practise his profession who will not take an oath of allegiance. Dr. R. T——, our principal physician, was attending the child of —— (formerly of the Confederate Army, *but now on parole*) for typhoid fever. He was sent for by the Provost-Marshal and asked if he was practising his profession in contravention of the order. He replied that he was not, but that he was practising philanthropy, advising his old patients without charge. He was told that if he did not cease to do so he would be sent to the Fort."

We need scarcely add that the injury here referred to was inflicted on the sick people, not on the doctors. But in order that there might be no mistake as to the motive of this petty tyranny, we learn from a recent letter in *The Times*, that women may not even purchase medicine for their sick children unless they first swear fealty to the Federal Government. And we may mention with pride, that the surgeon of one of the English ships stationed at Norfolk assiduously devoted himself to the task of attending to the young children, sick women and old men who were literally dying for want of the professional help which the local medical practitioners were forbidden to afford them, except on conditions which no real soldier or true gentleman would have sought to enforce under such circumstances.

We add another relation to prove that it is not without good cause we protest against a kind of warfare which no Government claiming to be recognised amongst Christian nations has a right to practise:—

The State of Virginia has an insane asylum at Williamsburg. When that town fell into the hands of the Federals there were 300 lunatics in the asylum. The physicians, keepers, and nurses were driven away, and the friends of the inmates forbidden to see or minister to them. The institution was placed under military rule, and the management assigned to

army surgeons, with common soldiers for nurses; and word was sent that if any attack were made the poor lunatics would be turned out and sent to Richmond, where was neither room nor accommodation for them.

Comment on such proceedings is superfluous. Whoever does such deeds as these, or sanctions their being done, is a common enemy to humanity, disgracing alike the calling of the soldier and the dignity of the man. And we, in this country, feel more bitterly the wrong, in that the combatants, both oppressors and oppressed, are near of kin to us, descended from the same stock, and speaking the same language:

"Eheu! cicatricum et sceleris pudet
Fratrum."

THE DIGNITY OF DRESS.

CHURCH discipline wisely provides that ministers shall assume a peculiar garb on all occasions when their office, rather than their individual presence, causes them to be specially observed; and the whims and fancies of certain clergymen about their robes and personal adornment have led to an amount of ecclesiastical bickering neither dignified nor edifying. The Law also requires a scrupulous observance of the usages it prescribes as to attire; and thereby great personal inconvenience is sometimes inflicted on portly wearers of forensic wigs and gowns, oppressed by the heat of argument or of the weather. The dress of the soldier is one of the chief responsibilities of his life. He may be as brave as Hector, and carry a sheaf of marshal's batons in his knapsack; but if slovenly in his attire he will inevitably be counted a bad soldier, and have to fight his own way at a great disadvantage. There is reason in all this care of dress, beyond that of merely ministering to the personal vanity of individuals; just as there is good reason for that punctilious observance of etiquette in attire still maintained on all state occasions. And there may be as much affectation in persistently disregarding the proprieties of dress as in observing them with extreme and obtrusive precision. Thus Diogenes paddling dirty footed on the rich carpets of his host, exclaimed, "So trample I on the pride of Plato." There was a world of dignified rebuke in the philosopher's rejoinder: "With greater pride."

There is special reason why those whose position is the reward of intellectual pre-eminence should, at fit seasons and in becoming manner, provide that the dignities which are their due and the honours they have fairly won should be recognised before men. They may reason that such things are beneath their notice, and may so permit carelessness about dress to grow into a habit, until the disregard of personal appearance may become as marked and sometimes as obtrusive a characteristic as the taking too much thought about personal decoration. It is not just to consider this excess of simplicity, this careful avoidance of any external sign of the wealth within, as an affectation, or as even approaching to wilful eccentricity. But the good wine which needs no bush may, for want of a sign, be sometimes disregarded; and if it be true that the cowl does not make the monk, it is equally true that none but the monk can wear the cowl.

Self-respect gains respect from others; and it is easy to understand how indifference to the privileges which honour and position confer may, where the despised dignity has been attained by individual merit, produce actual mischief. The prospect of becoming distinguished in the sight of men is one of the most honest and natural of the incentives of aspiring youth. So nothing can be more calculated to damp enthusiasm and to extinguish a kindling ambition than the reflection that those who have gained the coveted honours care nothing for their possession, and hold very cheap or utterly disregard the privileges they confer.

This view of the subject is especially worthy of professional consideration. We disclaim any purpose of advocating a return to the days of furred gowns and flat caps, of knee-breeches and full-bottomed wigs, of creaking shoes, clouded canes, and monstrous frills. These were more professional fopperies which have been wisely discarded. But we have rather drifted into the opposite extreme. And this has even gone so far that members of the profession who attend the Court receptions prefer the grotesque livery of the Court dress to the sweeping robes which denote their academical dignities. The natural inference of the lookers-on is that they are either ashamed of their profession or have no special costume that denotes their rank. In the lecture-theatre, at public ceremonies, in the solemn conclaves of learned bodies, and, in short, wherever it becomes a man to make his position known, we hold that the robes which betoken his professional status should be worn. We learn that some of the Universities have already had their attention directed to the present systematic disregard of the privileged costumes. We have shown that it is really of more importance than at first sight it may appear, and append a list which we believe to be correct of the hoods proper to the medical degrees of various Universities:—

	M.B.	M.D.
OXFORD	Blue silk, bound with white fur.	Scarlet silk, lined with crimson silk.
CAMBRIDGE	Black silk, lined with black.	Scarlet cloth, lined with rose-coloured silk.
LONDON	Black silk, with edge of violet silk.	Scarlet cloth, lined with violet silk.
DURHAM	Palatinate purple silk, lined with scarlet, edged with ermine.	Palatinate purple Cashmere, lined with scarlet silk. (Oxford shape.)
EDINBURGH	No special hood.	Black cloth, lined with scarlet silk.
ST. ANDREWS	Black silk or staff, lined with purple silk.	Purple cloth, lined with rose-coloured silk.
DUBLIN	Black silk, lined with rose-coloured silk.	Scarlet cloth, lined with rose-coloured silk.
QUEEN'S UNIV., IRELAND.	Same as Dublin.	Same as Dublin.

ÆSCULAPIUS IN ARMOUR.

THE present state of the Army Medical Department is undoubtedly a matter for very serious consideration by civil and military authorities. The deficiency in quantity and quality of candidates, arising from the extreme discontent of the officers already in the Department, and the general and widespread grumbling amongst the latter, are matters which very seriously threaten the well-being of the Department, and have indeed already compromised its efficiency in some respects. By great efforts, about a third of the number of candidates needed to fill vacancies are obtained, and something over thirty officers have now been got together for one hundred appointments.

This state of discontent and its grave consequences have for a very long time been ignored by the authorities, and the malcontents have had it all their own way. Their voices have rung so loudly and so often through these columns as to have penetrated every ear in the profession; and as it has been perfectly apparent that so unanimous an outcry could arise only as the result of deeply felt grievances, the effect has been to arrest the supply of candidates. Our duty in the matter has been very clear. We have placed before the profession a fair and impartial tithe of the letters from all sources which have been pouring in upon us from medical officers serving on home and foreign stations, under the most varied circumstances, and each independently exclaiming against the annoyances to which he is subjected and the injuries which sting him. The conclusion has been irresistible that their case was very strong; and it is, indeed, utterly impossible to believe that all these grievances are fancied, or that all our army medical correspondents in London, Aldershott, Shorncliffe, Dublin, the Curragh, India, Australia, and where not, are impelled by a monomania or are

under the influence of a delusion. Nevertheless it may well be that the case has two sides, which have not been regarded with equal care. Men in an official position are forbidden to defend themselves. The ways which are open to the complainants in such cases are only indirectly available for the defendants, and hence the response is far less clamorous than the accusation.

That side of the case was, however, put very forcibly in the important letter from "A Deputy Inspector-General" which we published last week. Those who read it with attention easily perceived that it proceeded from a highly informed source, and hence had special claims to their consideration; and from the replies which we have already received, it has obviously attracted that serious attention from our military medical readers which it deserves. The writer defended indirectly the powers that be, by intimating that some of the obnoxious regulations originated under the government of Lord Herbert, although only more recently published. This is a damaging line of defence, since it begins by an excuse which is an apologetic admission. It is obvious that the existing heads of office must always be held responsible for the acts of their administration, and responsibility to their department and to the public is the essential character of official headship. Moreover, we would remind any who may feel aggrieved at the reproaches leveled at the individuals who are held, by virtue of their position, accountable for the existing grievances, that it is necessary to distinguish public from all other relations; that their subordinates and their critics may entertain the highest personal esteem for those whose public conduct they may consider open to hostile remark.

The "Deputy Inspector-General" is of opinion that most of the grievances of the army medical officers are rather fancied than real. The presiding at mixed boards or at mess he regards as involving military command, and therefore out of the province of medical men; forage allowances he declares to be a question, not of rank, but of relative need, according to the character of duties; promotion he describes as certain, and the pay liberal. Our correspondents, on the other hand, dispute every one of these points. They are averse to the exclusion from authority, according to their rank, on boards relating to diet, dress, and such other matters on which their opinion is, in fact, in most cases decisive. They call to mind instances which illustrate the apportionment of allowances according to rank rather than to the exigencies of service. They dispute the alleged facility of leave, and declare that under the present system a man may remain for twenty years an assistant-surgeon, and that promotion is therefore far from being placed on a satisfactory footing.

The "Deputy Inspector-General" omits all reference to the obnoxious order of branding in hospital, and himself pleads for an earlier period of retirement. His letter, however, opens a new phase of this discussion, since he undoubtedly expresses the opinion of a small but by no means uninfluential section of the body in the calm but well-weighed language of a man fully acquainted with both sides of the case.

We leave the subject still open to further discussion, but must express the hope that our correspondents will remember that we have already devoted large space to the statement of their claims and the support of their interests; and that they will endeavour to observe brevity in those arguments for which publication is desirable.

THE ACTION OF WATER ON LEADEN PIPES PREVENTED.—Dr. Schwarz, of Bremen, has discovered a simple yet scientific process of preventing injurious effects arising from the passage of water through leaden pipes. He proposes that a solution of sulphide of potassium, at a temperature of 212 degrees, be passed through the pipe; this changes the metallic lead into a sulphide of lead, and, thus transmuted, the water passes over it perfectly free from the risk of contamination by any poisonous salt in the lead.

Medical News.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—At a general meeting of the Fellows held on Wednesday, the 30th ult., the following gentlemen, having undergone the necessary examination, were duly admitted Members of the College:—

Fenwick, Samuel, M.D. St. Andrews, 74, Harley-street.
Fussell, Edward Francis, M.B. Aberdeen, Brighton.
Moore, William Withers, M.D. Edin., Brighton.
Mushet, William Boyd, M.B. Lond., Upper Norwood.
Sutton, Henry Gowen, M.B. Lond., 5, Warliter's-buildings, Holloway.
Thorowgood, John Charles, M.D. Lond., 10, Finsbury-circus.

At this meeting the following gentlemen were reported by the Examiners to have passed the examination in the subjects of General Education:—

Barry, James W., Ramsgate.
Edwards, Edward N., Chatham.
Evans, David, Wrexham.
Howard, James, Dukinfield.
Hurliston, M. de Galway, Great Russell-street, Bloomsbury.
McDonald, John C. F., Denbigh-street, Belgrave-road.
McGregor, Alex., Acton, Northwich.
Parkinson, Edmund W., Red Hill.
Parr, Charles, 16, Ashley-place, Westminster.
Parr, George, do. do.
Rhodes, Charles J., Pontefract.
Strange, Frederick W., Beenham, Reading.
Ward, John L. W., Cardiff.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on the 24th ult.:—

Richards, Joseph Peake, Oxford-terrace, Islington.
Serjeant, David Maurice, Queen's-road, St. John's-wood, N.W.
Taxford, Arthur, Boston, Lincolnshire.
Vallance, Edmund, Brighton.

The following gentleman also on the same day passed his first examination:—

McMahon, James Thomas, Charing-cross Hospital.

PRELIMINARY EXAMINATION IN ARTS.—The following gentlemen passed the Preliminary Examination in Arts, at the Hall, on the 25th and 26th of September, 1863, viz.:—

W. C. Bucknill,
John James Ridge,
H. J. Kendrick Vines,
} Special Certificate of Honour.

Alford, Samuel, Taunton.
Andrews, Arthur, Hertford.
Austin, S. C., Bilderton.
Barrett, Samuel, 29, Merrick-square.
Bell, Chas. T., Sheffield.
Bevan, John R., St. Ives, Cornwall.
Booth, Jas. Webb, Huddersfield.
Bosworth, J. R., Weymouth.
Brumwell, G. W., Kendal, Westmorld.
Bucknill, W. C., Nuneaton.
Burn, W. B., Fore-street, Limehouse.
Carré, Louis C. A., Bath.
Cheyne, W. R., 27, Nottingham-place.
Crew, Eli, Tetbury.
Cross, James, Prescot, Lancashire.
Daldy, Fk. Sam., Broad-st. Buildings.
Derry, B. Gedley, Plymouth.
Edwards, F., Otten, Belchamp.
Ellis, Percy M., Botesdale.
Etheredge, G. E. F., Starston, Norfolk.
Fowke, F. W., Byfield, Northampton.
Gay, John Henry, Wisbeach.
Hedley, Chas., Richmond, Yorkshire.
Hensman, C. F., Kimbolton.
Hickman, T. H., Riseley, Bedfordsh.
Higgins, A. H., St. John's, Southwark.
Hopkins, F., Birmingham.
Hovegood, Samuel, Williton.
Inglis, W. W., Commercial-road.
Jay, Henry Mason, Malmesbury.
Kemp, William George, Canterbury.
Lloyd, William, Carmarthen.
Maddox, Wm. George, Euston-square.
Moore, Walter, Warwick.
Murphy, Shirley F., Gower-street.
Ogden, Charles, Rochdale.
Payne, William Hill, Bristol.
Pitt, Isaac, Willenhall, Stafford.
Read, Charles, 1, Guildford-place.
Ridge, John James, Thomas-street, Southwark.
Rogers, F. W., 71, Finchley-rd., N.W.
Sampson, C. H. A., Stoney Stratford.
Sandwell, Ed., Gerrard-street, Soho.
Scatchard, T. E., Boston Spa, Yorksh.
Shackelford, S. D., Husband, Bosworth.
Slipper, R. H., 87, Leather-lane.
Smith, Eldred N., Hertford.
Strange, F. W., Liverpool.
Tattersall, Lord, Blackpool.
Todge, Richard, Stoney Stratford.
Vines, H. J. K., Reading.
Visick, Clarence, 14, Regent's-pk.-rd.
Wallis, Ed. D., Bodmin, Cornwall.
Wallwork, J., Tyldesley, near Manchester.
Waterworth, E. A., Newport, Isle of Wight.
Williams, W. E., Lanhilleth, Monmth.
Woods, G. A., Southport.

THE NEW DORSET LUNATIC ASYLUM, containing accommodation for 300 patients, is now completed.

SCURVY IN THE UNITED STATES ARMY.—Scurvy is prevalent in the army of the Potomac.

OBSTETRICAL SOCIETY OF LONDON.—The ordinary meetings of this Society will be resumed on Wednesday next, the 7th inst., at eight P.M. Papers by Mr. Hardey of Hull, Dr. Madge, and Dr. Pritchard of Glasgow, will then be read.

THRASHING MACHINES AND BRONCHITIS.—It has been found in some of the communes in France that the use of the thrashing and winnowing machines has produced an immense amount of bronchitis and disease of the throat and chest among the labourers employed, so that there are whole families of confirmed invalids. To such an extent has the evil proceeded that the mayors have ordered that labourers thus employed must work in veils.

THE FORTESCUE MEMORIAL.—On the 23rd ult., an interesting ceremony took place at Barnstaple, on the occasion of the opening of an additional wing to the North Devon Infirmary, which had been erected at a cost of about £700 out of the funds wherewith to raise a memorial to the late Lord Fortescue, Lord-Lieutenant of Devon. A statue of the noble earl had already been placed in the Castle-yard at Exeter.

LIABILITY OF EMPLOYERS FOR MEDICAL ATTENDANCE ON THEIR SERVANTS.—An action has been brought in the Westminster County Court by Dr. Grady, of Warwick-square, to recover the sum of fifteen guineas from the defendant, a licensed victualler, now residing at Tottenham, lately the proprietor of the Duchess of Clarence, Warwick-street, Pimlico.—The point at issue was, whether the defendant had engaged the services of the plaintiff, who made a claim of fourteen guineas for fourteen attendances, and one guinea on account of vaccination.—Several witnesses were examined, from whose evidence it appeared that the servant of the defendant had the small-pox, and that defendant offered to pay plaintiff half-a-sovereign on account of the vaccination. Defendant denied having engaged plaintiff to attend on his servant, and he was supported in his statement by his witnesses.—His honour summed up the case, and referred to several decisions in the superior courts, the decisions being founded upon Acts of Parliament, by which it was held that an employer could only be compelled to pay for medical attendance for an apprentice.—The jury gave a verdict for the defendant. Of course it is necessary to state that this decision refers to cases in which the plaintiff could not prove that the defendant had contracted to pay for medical services rendered to his servant. Such a contract must be proved by the plaintiff by direct evidence; such as a written engagement, or promise to pay in the presence of a witness.

THE INFLUENCE OF AGE ON THE MORTALITY OF TROOPS.—The Army Medical Report just published shows that of troops serving in the United Kingdom under 20 years of age the deaths are 2·34 per 1000, while throughout England and Wales the mortality was 7·41 per 1000; from 20 to 24 it was 6·40 against 8·42; from 25 to 29, 9·65 against 9·21; from 30 to 34, 11·97 against 10·23; from 35 to 39, 12·07 against 11·63; from 40 and upward, 23·61 against 13·53.

SANITARY STATE OF COCKERMOUTH.—On Monday, the 21st ult., Dr. Elliott, of Carlisle, addressed a crowded meeting of the principal inhabitants of Cockermouth, on the advantage of adopting the provisions of the Local Government Act of 1858. The meeting resolved "that the adoption of the Act would conduce to the health, cleanliness, and morality of the town, and pledged itself to promote that result." It is gratifying to learn that the benevolent exertions of the venerable doctor were attended with a beneficial result.

AGE OF THE PEOPLE.—England (including Wales) was found to have in it, when the census was taken in April, 1861, 593,721 babes and sucklings under one year old; 2,107,061 infants of one year but under five years old; 2,344,066 children of 5 to 10; 1,059,889 boys and 1,045,287 girls of 10 to 15; 957,930 youths and 974,712 girls of 15 to 20 (of these 29,719 were married); 1,594,497 young men and 1,804,160 young women of 20 to 30; 2,947,534 men and 3,149,320 women of middle age, 30 to 60; 641,282 old men and 733,515 old women, 60 to 80; and 47,260 very aged men and 65,990 very aged women, above 80. The young population under 20 amounted to 9,082,666; the population 20 years old and upwards were 10,983,558.

PLYMOUTH PUBLIC DISPENSARY.—Dr. Cookworthy, the senior physician, will tender his resignation (after a faithful and lengthened service of nearly half a century) on the 27th inst., when arrangements will be made to supply his place.

UNHEALTHY TRADES.—Dr. Delpech, of the School of Medicine of Paris, has recently published some important observations on the effect of sulphuret of carbon and other noxious substances employed in trades. Sulphuret of carbon is chiefly employed in the manufacture of vulcanized india-rubber, and exposure to its effluvia causes headache, vertigo, and an over-excitement of the nervous system. The patient talks with great volubility, sings incoherently, laughs immoderately, or hides himself and weeps. This state may lead to lunacy, or will cause obtuseness and imbecility. Dr. Delpech has devised several mechanical contrivances for the prevention of the inhalation of the fumes of the sulphuret, and as an internal remedy employs phosphorus.

MEDICAL APPOINTMENTS.

F. J. ALEXANDER, L.R.C.P.Ed., has been elected Medical Officer and Public Vaccinator for the Metfield District of the Hoxne Union, Suffolk, vice E. Wells, L.S.A., deceased.

C. O. ASPRAY, M.D., has been appointed House-Surgeon to the Western General Dispensary, Marylebone-road.

W. BARBER, M.R.C.S.E., late Assistant House-Surgeon to the Infirmary, Stockport, has been appointed Medical Officer to the Cheadle District of the Stockport Union.

J. BORLAND, M.D., has been appointed Public Vaccinator for Kilmarnock.

Mr. F. W. COOPER has been elected Assistant House-Surgeon to the Public Hospital and Dispensary, Sheffield, vice A. L. Peacock, resigned.

J. A. COWPER, M.D., has been appointed Public Vaccinator for Dundee.

R. DUCHESNE, M.D., has been appointed Medical Officer and Public Vaccinator for the Woodford District of the West Ham Union, Essex, vice W. H. Cary, M.R.C.S.E., resigned.

T. GRAHAM, M.D., has been appointed Public Vaccinator for the Burgh Parish of Paisley.

W. G. HAMILTON, M.D., has been appointed Medical Officer and General Superintendent of the Dundee Royal Infirmary, vice J. Glen, M.D., deceased.

T. E. HEADLAM, M.D., has been appointed Consulting Physician to the Newcastle-upon-Tyne Dispensary and Fever Hospital, on resigning as Physician.

J. HENDERSON, L.F.P. & S. Glas., has been re-elected Medical Officer for the Lower Deptford District of the Greenwich Union, on the expiration of his appointment.

D. JACKSON, L.F.P. & S. Glas., has been appointed Public Vaccinator for Dunoon, Ayrshire.

T. MALCOLM, L.R.C.S.Ed., has been appointed Public Vaccinator for St. Andrews, Fifeshire.

R. MOFFAT, M.D., has been appointed Public Vaccinator for the Parishes of Polmont and Muiravonside, Stirlingshire.

R. D. NICOLLS, L.R.C.P.Ed., has been elected Medical Officer to the Constabulary of Dillon's-bridge and Dunsany, vice H. B. Webb, M.R.C.S.E., deceased.

G. H. PHILIPSON, B.A., M.B., has been elected Physician to the Newcastle-upon-Tyne Dispensary, vice T. E. Headlam, M.D., resigned.

A. RAE, L.F.P. & S. Glas., has been appointed Public Vaccinator for Stonehouse-by-Hamilton, Lanarkshire.

R. F. TAYLOR, L.F.P. & S. Glas., has been appointed Public Vaccinator for Inchlan, Ayrshire.

J. W. TEALE, M.A., M.R.C.S., has been appointed House-Surgeon to the Bath United Hospital.

Births, Marriages, and Deaths.

BIRTHS.

On the 3rd of Aug., at Murree, the wife of G. V. Curtis, Civil Surgeon, of a son.
On the 21st of Aug., at Mount Aboo, the wife of T. M. Lownds, M.D., Surgeon to the Rajpootana Agency, of a son.
On the 14th ult., at Pontardawe, Swansea-vale, the wife of G. Kirkhouse, M.R.C.S.E., of a son.
On the 19th ult., at Lower Leeson-street, Dublin, the wife of Edmund Lawless, M.R.C.S.E., Surgeon R.N., of a daughter.
On the 30th ult., at Banna House, Ardfert, Co. Kerry, the wife of Ulysses Fitzmaurice, L.K.Q.C.P.I., of a son.
On the 21st ult., at York-road, Lambeth, the wife of F. Blackman, M.R.C.S.E., of a daughter.
On the 22nd ult., at Upper Harley-street, the wife of W. Wood, M.D., of a son.
On the 23rd ult., at Belgrave-road, the wife of J. G. Dudley, M.D., of a son.
On the 23rd ult., at Crellin's-hill, Douglas, the wife of G. L. Anderton, M.D., of a son.
On the 28th ult., at Heath-street, Hampstead, the wife of R. R. Prance, M.D., of a son.
On the 28th ult., at Bishopsgate-street Without, the wife of R. Fowler, M.D., of a daughter.

MARRIAGES.

On the 9th ult., at Rivenhall, Walter H. Cope, M.R.C.S.E., of Winchester-terrace, Cheyne-walk, to Emma, eldest surviving daughter of Geo. Potter, Esq., of Hoo Hall, Rivenhall, near Witham, Essex.—No Cards.
On the 17th ult., at the British Consulate, Bayonne, Charles Edward, third son of the late James Chapman, Esq., of Preston, Lancashire, to Emily Harriet, third daughter of Drewry Ottley, M.D., of Pau.
On the 19th ult., at Dr. Raffles' Chapel, Great George-street, Liverpool, R. H. D. Johnson, M.R.C.S.E., to Miss E. Boyer, of Chesterfield, Derbyshire.
On the 30th ult., at the Parish Church of Towcester, Northamptonshire, Henry Harland, M.D., of Mayfield, Sussex, to Sarah Frances Julia, youngest daughter of the late Wm. Gilbert Elliott, Esq., Solicitor, of Blisworth.—No Cards.

DEATHS.

On the 29th of July, H. B. Webb, M.R.C.S.E., of Tara, Navan, Co. Meath.
On the 12th ult., S. Newton, L.S.A., of Withington Cottage, Astley, near Manchester.
On the 13th ult., J. Ferguson Lindley, M.R.C.S.E., of Cheadle, formerly of Staleybridge, aged 36.
On the 16th ult., at Oreadia Villa, Island of Bute, A. Muirhead, M.D., Deputy Inspector-General of Hospitals and Fleets R.N. (on the retired list).
On the 19th ult., at Buntingford, Herts, W. H. Moor, M.D., aged 33.
On the 23rd ult., at Greenock, Malcolm Macfee, L.F.P. & S. Glas., aged 27.
On the 23rd ult., at Great Trinity-lane, City (in which neighbourhood he had practised for nearly forty years), Wm. May, M.R.C.S.E., suddenly, of apoplexy, aged 67.
On the 24th ult., at St. Owen's-street, Hereford, J. Price, M.R.C.S.E., formerly in the Hon. E.I.Co.' Service, and afterwards Surgeon Royal Artillery.
On the 27th ult., at Scilly, Kinsale, M. O'Hea, M.D., aged 68.

Medical Diary of the Week.

MONDAY, OCT. 5	ST. MARK'S HOSPITAL FOR FISTULA AND OTHER DISEASES OF THE RECTUM.—Operations, 1½ P.M. METROPOLITAN FREE HOSPITAL. — Operations, 2 P.M.
TUESDAY, OCT. 6	GUY'S HOSPITAL.—Operations, 1½ P.M. WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEDNESDAY, OCT. 7	MIDDLESEX HOSPITAL.—Operations, 1 P.M. ST. MARY'S HOSPITAL.—Operations, 1 P.M. UNIVERSITY COLLEGE HOSPITAL. — Operations, 2 P.M. HUNTERIAN SOCIETY. — 8 P.M. Mr. Hutchinson, "On the supposed Effect of Tobacco in Producing Amaurosis." OBSTETRICAL SOCIETY OF LONDON.—8 P.M. Mr. Hardey (Hull), "On Retroflexion of the Uterus." — Dr. Madge, "On Hydrocephalus." — Dr. Pritchard (Glasgow), "On Abortion produced by Tents of Sea Tangle."
THURSDAY, OCT. 8	ST. GEORGE'S HOSPITAL.—Operations, 1 P.M. CENTRAL LONDON OPHTHALMIC HOSPITAL — Operations, 1 P.M. LONDON HOSPITAL.—Operations, 1½ P.M. GREAT NORTHERN HOSPITAL, KING'S CROSS.—Operations, 2 P.M. LONDON SURGICAL HOME.—Operations, 2 P.M. WEST LONDON HOSPITAL.—Operations, 2 P.M. ROYAL ORTHOPÆDIC HOSPITAL. — Operations, 2 P.M.
FRIDAY, OCT. 9	WESTMINSTER OPHTHALMIC HOSPITAL. — Operations, 1½ P.M.
SATURDAY, OCT. 10	ST. THOMAS'S HOSPITAL.—Operations, 1 P.M. LOCK HOSPITAL, Dean-street, Soho.—Clinical Demonstrations and Operations, 1 P.M. ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M. KING'S COLLEGE HOSPITAL.—Operations, 1½ P.M. ROYAL FREE HOSPITAL.—Operations, 1½ P.M. CHARING-CROSS HOSPITAL.—Operations 2 P.M.

To Correspondents.

Student.—There are two Dental Hospitals now established in London—one in Soho-square, and the National Dental Hospital in Great Portland-street. The first was founded by those who from the commencement advocated union with the College of Surgeons; the second by those who supported the College of Dentists, and therefore no attempt was made to have the practice of the latter hospital recognised by the College of Surgeons. In consequence of the recent union of the opposite parties, however, the practice of the National Dental Hospital is now recognised by the College of Surgeons. The school has also been removed to this hospital, and organized in accordance with the requirements of the College.

Mr. J. J. R——, (Walsall.)—A parishioner may be summoned under the Vaccination Act for neglecting to have his child vaccinated, provided the child be not proved by medical certificate to have been in an unfit state for the performance of the operation. The penalty has been enforced in several instances, and we believe the magistrate has no option but to convict if the case be properly proved.

A Lecturer.—The gentleman who so admirably reported for THE LANCET Professor Huxley's Lectures, delivered at the Royal College of Surgeons, is Mr. T. Reed, of the firm of Reed, Robeson, and Woodward, Shorthand Writers, Chancery-lane.

Old Subscriber.—Taylor on Poisons; Christison's work.

Ignarus.—It is doubtful whether our correspondent incurs any legal responsibility in taking the step proposed. We think he may do it with perfect safety.

A MEDICAL CLUB.

To the Editor of THE LANCET.

SIR,—There is no profession in the United Kingdom that has more difficulties and disappointments to contend with at its commencement than the medical. No medical gentleman who has fairly endeavoured to make a practice for himself, either in town or country, needs to be informed of the difficulties, trials, and up-hill work that have to be encountered and borne with in the practice of this profession, and all will be unanimous as to the shameful way in which doctors are remunerated for their labour, anxiety, and expense. I, as a medical practitioner of only a few years' standing, have experienced a good many of these disadvantages, and I have no doubt there are many who can say the same. Now, medical practitioners, being exposed to all changes of weather and an innumerable variety of diseases, are by no means proof against these changes and diseases, but often fall victims to them, when all their welfare and maintenance depend upon the enjoyment of good health.

The thought has often occurred to me that medical practitioners might greatly help each other under such circumstances. I have experienced, and have friends who have experienced, the drawbacks of a long-protracted illness, occurring when striving for a living. There are Clubs now of nearly every description, Odd Fellows, Foresters, &c. And why not a Medical Club be established for the aid of professional brethren? I am aware that there are many whom Fortune has carried to the top of her tree; but these will be only the better able to aid in encouraging and assisting those who are now hard-working and ill-recompensed labourers, and who are the majority of the profession.

I am, Sir, yours truly,

September, 1863. A YOUNG PRACTITIONER.

A Young Physician.—1. It is in the power of the College of Physicians to erase his name from the list of members. It is for them to take the initiative.—2. Professional rectitude and professional honour will be satisfied by the erasure of M.R.C.P. from the Medical Register. — 3. There have been several cases in which the name of a member of the College has been erased from the roll in consequence of his practising as a "general practitioner." In the present very unsatisfactory state of the laws relating to the medical profession, it is doubtful whether such a step would now be taken.

F.R.C.S. Edin.—The right to register any such qualification is left to the Medical Council to decide. The degrees may be obtained after examination at Paris, Vienna, Berlin, Heidelberg, &c., where the possession of a British diploma by the candidate is regarded as a sufficient qualification to entitle him to an examination.

Naturalist.—The instance is not unique. In an American journal we lately read that M. Miche, dining with some friends, found that the bones of a fowl he was carving were as black as ink. Surprised at this, he sent the skeleton of the bird (of Cochin China breed) to M. Flourens, who exhibited it, with another similar one of a common fowl, to the Académie.

Physician and Surgeon has not complied with our invariable rule of requiring the name and address of a correspondent.

A Country Practitioner will find the information he seeks in Beasley's Book of Receipts.

THE INDIAN ARMY MEDICAL SERVICE.

To the Editor of THE LANCET.

SIR,—Unless a young surgeon possess a tolerable private fortune, a constitution of iron, and a temper combining the meekness of the lamb with the long-suffering patience of the camel, to enter the army now, with the prospect or even remote possibility of serving in India, would be one of the maddest things he could possibly do. If, notwithstanding the many warnings he is constantly receiving from his professional brethren in India, he should still persist in taking such a step, he will repent it bitterly to the last hour of his life; for it is a step from which, if once taken, there is no retreat, as many an unfortunate medical officer has found out to his cost, when ruined in health and prospects, overwhelmed with debt and enfeebled by disease, he thinks for the last time of what he is, and what he might have been—realizing, as his thoughts fly back once more towards the old home and the old country, all the intolerable agony of regret that comes too late.

There is no Government servant in India whose position is so anomalous and pay so mean and insignificant as those of the medical officer. Although borne on the strength of the army, and amenable to military law in its strictest details, he is, in fact, looked upon and treated as a civilian in all matters bearing upon his social condition, excepting in the matter of pay. So in one instance at least he has the honour of being recognised as a "military" man in the fact of being stringently limited to the military rate of pay. As an assistant-surgeon, he is supposed to rank with a lieutenant; but let him try the question on any occasion in which himself and other lieutenants are concerned, and he will soon find himself pushed to the wall. On the other hand, there is no supposition at all about his receipt of lieutenant's pay. It is simply an unpleasant reality. It is true that if he be in charge of a regiment, he will receive the splendid monthly remuneration of 421 rupees; but otherwise the less magnificent allowance of 225 rupees will be his regular pay. Should he, however, obtain charge of a civil station and jail, he will be blessed with a salary of 300 rupees, with an extra 50 rupees if charge of a dispensary be added to his other duties. Thus, Sir, a medical officer of eight or nine years' service (possibly a married man with a family) may find himself in the monthly receipt of 421 rupees at the utmost, from which four per cent. income-tax, and probably 50 or 60 rupees medical fund subscriptions (I am paying 60 rupees), must be deducted. You see, Sir, he will not have very much to build up that fabulous fortune popularly supposed to be the natural result of "an appointment" in India!

Now, Sir, the splendid sums above enumerated are the emoluments granted, not to raw lads fresh from Addiscombe or Hailebury, but to surgeons and physicians of age and experience, of whom many have seen every variety of military service. If, bearing this in mind, you will turn to the "Civil Service List" of the Madras Presidency, and refer to the names of men of the "fourth class of eight years' standing," you will see that not a single one of them is in receipt of less pay than 1200 rupees a month, the average being considerably higher; whilst even natives, of the uncovenanted civil service, receive monthly salaries of 500 or 600 rupees. Why this astounding difference should exist between the pay of a medical officer and that of district collectors' and magistrates' assistants, is altogether incomprehensible, if we look at the question merely as one of justice, for the work the latter perform is simply such as anyone of not absolutely weak intellect could perform with ease.

The famous Warrant, of which so much was written and spoken "long, long ago," exists only on paper; and the "amalgamation scheme," that was to have come out two years ago, but did not, is altogether a delusion, a mockery, and a snare!

It is also well to note that whilst house-rent is almost double, and the prices of meat, bread, and all kinds of provisions at least fifty per cent. dearer than formerly,—wages and the value of labour having of course risen in proportion,—the pay of the medical officer has remained unaltered, excepting in some cases where Government has diminished it! For example, medical officers in charge of sebundy corps were formerly paid for such extra duty. Now they are not, Government having changed the name of "sebundy" to "police," increased the number of the men considerably, and, whilst imposing heavier duties upon the medical officer, abolished the head-money allowance he had formerly received!

It is rumoured in India that Government does not care about getting good men into its service, provided it can get *cheap* men; and the shabby manner in which medical men now in the service are treated fully bears out the report. Let the junior members of our profession look well to this. The future of the army medical service is in their hands. It is for them to decide whether it shall become a service suitable for educated gentlemen to enter, or finally sink into the slough of despond, towards which it is now so rapidly tending. By the best men of our schools systematically holding aloof from the so-called "competitive examinations," Government may possibly be brought to recognise the fact that medical men are not the mere cattle it takes them to be; and that to heap upon them indignity and injustice, to pay them like footmen and treat them like ploughboys, is a system to which members of a highly honourable and scientific profession will no longer submit.

I remain, Sir, your obedient servant,

India, July, 1863. X. Y. Z.

Enquirer.—Caoutchouc (virgin gum) becomes more soluble in oil of turpentine or benzine if it have been previously soaked in ammonia until decolorized. If it be then washed with water and dried, it will dissolve all the more readily in the above-mentioned menstrua.

One Tired of Waiting.—The Americans have outrun us. The labours of the Committee of Revision and Publication of the New Pharmacopœia are at an end, and the new authoritative manual is now before the profession.

THE MEDICAL PROFESSION AND LIFE ASSURANCE OFFICES.

To the Editor of THE LANCET.

SIR,—Letters frequently appear in medical journals, complaining of the illiberality of assurance companies towards medical men. Can the new company, entitled "City and County Assurance Company, Limited," be called the reverse of illiberal? I have just received a prospectus from this new company, at the head of which are the following words:—"For the Medical Profession." Enclosed with the prospectus is a letter, from which the following is extracted:—

"The directors being fully aware of the influence of the medical profession in the cause of assurance generally, and being anxious to secure so desirable a connexion, have decided, before going to the public for shares, to receive applications from medical men for three weeks from this date.

"In most companies the shareholders can exercise but little, if any, influence in increasing the profits; but in an insurance company they can do so to a great extent. It is therefore certain that with medical referees as shareholders throughout the kingdom, the influence that would be brought to bear would be immense, and would speedily make this company one of the most successful of the present day.

"In the life department all the newest and most important features will be introduced, and the question of fair remuneration for reports from the medical gentlemen will be arranged so as to meet the wishes of the profession generally.

"Whilst not pledging themselves to allot shares in every instance, the directors will give preference to applications from medical men."

I think it would have been much less questionable generosity of this company if, instead of inviting medical men to run the first risk, it had previously got a substantial portion of its capital subscribed by the general public, and then reserved for the medical men a portion of the shares in consideration of the great good the company acknowledge the profession may be able associatively to bring with it. Personally, I would far rather the company had achieved some solid success before accepting such a special invitation, and I should have had greater confidence in their consideration for the profession had they been in a position to offer to it some real boon. As a rule, I am inclined to consider all such exceptional headings, so addressed to particular professions and callings from untried undertakings, as coming in a very "questionable shape."

I am, Sir, yours obediently,
Lower Norwood, Sept. 1863. JOHN SHARMAN, M.R.C.S.

J. L.—The preparations of bismuth are usually regarded as sedatives to the gastric nerves. They frequently give relief in certain forms of gastrodynia.

A Constant Subscriber, (Bournemouth.)—There are several cases on record, to which we will endeavour to refer our correspondent next week.

An Assistant inquires how the Club for the Protection of Medical Assistants is progressing.

GREEK FIRE.

To the Editor of THE LANCET.

SIR,—Your correspondent, "Arthur," should consult the 52nd chapter of Gibbon's "Decline and Fall of the Roman Empire;" also the article "Fire (Greek)" in the *Penny Cyclopædia*.

Yours faithfully,
September, 1863. E. H. R.

Iatros, (Liverpool.)—A tacit understanding is not binding in law. There is no remedy in the case mentioned.

W., (Edinburgh.)—By application to the Director-General of the Army Medical Department, Whitehall-yard, London.

C. H. informs us that the late Mr. Wakley held three or four inquests in monasteries and nunneries in his district. One was at Isleworth.

TREATMENT OF SPASMODIC ASTHMA.

To the Editor of THE LANCET.

SIR,—None of your correspondents, in reply to "A Professional Brother," have mentioned stramonium. I would advise the sufferer to try the effect of smoking that drug, as I have found it very useful in warding off attacks, and in nearly all cases affording considerable relief, when other remedies were of no avail. The stalks and leaves of the plant are finely chopped, placed in a common tobacco-pipe, and smoked in the ordinary way. An interval of a minute or so ought to elapse between each whiff; and if any giddiness should supervene, its continuance may be cautiously persevered with, allowing a longer interval to elapse between each inhalation of the fumes. Of course it ought not to supersede, but simply be an adjunct to, any dietetic measures.

I am, Sir, your obedient servant,
Margate, September, 1863. R. HENRY MILSON, M.R.C.S.

A Young Practitioner (Ponmeenmaur) will find the information he requires in the Students' Number of THE LANCET.

Not a Party-man.—It is reported that there is some difficulty experienced in the North in procuring surgeons and assistant-surgeons for the coloured regiments; while the line officers are in excess of the demand.

TASTELESS MEDICINES.

To the Editor of THE LANCET.

SIR,—Your journal of the 12th instant contains a paragraph, headed as above, alluding to the recent discovery of M. Graw, a French physician, of the virtues of chloroform in destroying the taste of intensely bitter medicines.

I beg permission to state that I have used chloroform for some years to disguise the taste of nauseous saline medicines, which it renders perfectly agreeable. Its anti-spasmodic properties I consider of great additional value in drastic saline purgatives.

I am, Sir, your obedient servant,
Newcastle-upon-Tyne, Sept, 1863. ALFRED SCOTT GELL, M.R.C.S.

Mr. J. Zachariah Laurence.—The practice of writing circular letters to the medical journals is, in our opinion, very objectionable, and we regret that Mr. Laurence did not content himself with the publicity which any one journal could give to his views.

Mr. A. Simon, (Greenwich.)—We believe that at the Victoria Baths, Westminster, he can obtain the form of bath which he desires.

BEDFORD MEDICO-ETHICAL ASSOCIATION.

IT is evident from the following that the establishment of a Medico-Ethical Association at Bedford was necessary.

To the Editor of THE LANCET.

SIR,—Not long since your attention was drawn to a meeting of medical men at Bedford, at which a Medico-Ethical Society was formed. The Secretary of the above Society has caused to be distributed in the town large numbers of the enclosed circulars. I think for the benefit of some of the profession who may be commencing practice the idea might be useful. The gentleman who issues the circular is a M.R.C.S. and L.S.A., and an aspirant for the M.D. of the University of London. If you could find space in your valuable journal for his list of prices, you would show the profession the petty shifts and manœuvres men are capable of resorting to for practice.

I am, Sir, yours, &c.,
Bedford, September, 1863. ECCE HOMO.

"Medical Club, 5, St. Peter's-green, Bedford. Terms per quarter for medicine and attendance:—A man, wife, and family of more than two children, 2*s.* 6*d.*; ditto, with not more than two children, 2*s.*; man and wife, 1*s.* 6*d.*; any single person above sixteen, 1*s.*; family under sixteen, 1*s.*; midwifery, if paid at time, 10*s.* 6*d.* All payments to be made in advance. Entrance may be effected at any time. Patients to attend at Mr. Carter's surgery at nine o'clock any morning, or six in the evening. If unable they will be visited."

THE communications of *Dr. Wade*, *Dr. Gason*, and *Dr. Mackintosh* shall be published next week.

Mr. T. F. Roberts.—Clause 5 of the Medical Witnesses Act states as follows:

"Provided also, and be it further enacted, that when any inquest shall be holden on the body of any person who *has died in* any public hospital or infirmary, or in any building or place belonging thereto, or used for the reception of the patients thereof, or who has died in any county or other lunatic asylum, or in any public infirmary or other public medical institution, whether the same be supported by endowments or by voluntary subscriptions, then and in such case nothing herein contained shall be construed to entitle the medical officer whose duty it may have been to attend the deceased person as a medical officer of such institution as aforesaid, to the fees or remuneration herein provided."

The words in italics are sufficient to show that the person must have died *in* the hospital. The Middlesex Coroners act upon this common-sense view of the law.

Mr. E. J. Morris.—He is not entitled by law to assume the title, nor is there any statute to prevent him so doing.

IF *An Advertiser* will forward to us his name and address in confidence, his communication shall receive attention.

LACTATION IN AN INFANT.

To the Editor of THE LANCET.

SIR,—The following case occurred in my practice recently, and as it was something entirely new to me, I should like to know whether it is often met with:—

I attended Mrs. W—— of her first child on September 1st, and on the 21st she called my attention to the breasts of the infant (a female). They were full and hard, and there were well-formed nipples, from which, on pressure of the breast, a quantity of milk could be expressed. The secretion has continued now for above a week, and is still going on. That it is genuine milk I have no doubt. On examining it under the microscope, the distinctive fat-globules, surrounded by their albuminous envelope, were very numerous and clear. The fluid was exactly similar to the mother's milk (which I also examined microscopically), the only difference being that the fat-globules in the infant were very much smaller.

I am, Sir, yours obediently,
Manchester, September, 1863. M.D.

OWING to the length at which we have reported the Introductory Lectures this week, we are compelled to postpone Original Articles, the Mirror of Hospital Practice, and Correspondence, including the letters in reply to that of "A Deputy Inspector-General."

COMMUNICATIONS, LETTERS, &c., have been received from — Mr. Barwell; Mr. Robson; Dr. Edmunds; Dr. M'Grigor Croft; Mr. A. Simon; Dr. Guy; Mr. Roberts; Mr. Andrew; Dr. Allan, (with enclosure;) Mr. Graves; Mr. Pratt, (with enclosure;) Mr. J. Teale; Dr. Tilbury Fox; Dr. Cuthbertson, (with enclosure;) Mr. J. Z. Laurence; Mr. Kearns, (with enclosure;) Mr. J. Swann, (with enclosure;) Mr. J. Humphrey, (with enclosure;) Dr. M'Rae, (with enclosure;) Dr. Gason, Rome; Mr. Biddle, (with enclosure;) Mr. E. Greensill, (with enclosure;) Mr. Fuller, (with enclosure;) Mr. Thackwell, Mr. Lyddon, (with enclosure;) Mr. Parker, (with enclosure;) Dr. Wade; Dr. Dandas Thomson; Messrs. Howard and Sons, (with enclosure;) Mr. Lake; Dr. Burke; Dr. Rayner; Mr. Rablah; Mr. Muriel; Mr. Philipson; Mr. Peel, (with enclosure;) Mr. Cooper; Mr. Morris; Dr. Webb, (with enclosure;) Mr. Rayner, (with enclosure;) Dr. Eastwood, (with enclosure;) Mr. Robertson, (with enclosure;) Dr. Mackintosh; Mr. Davies; Mr. Newman; Mr. Barker; Mr. Ling; Dr. M'Nab; Mr. J. Thompson; Mr. Thorp, (with enclosure;) Dr. Constable; Dr. Douglas, (with enclosure;) Mr. G. Sutcliffe; Mr. Walton; Mr. R. Raper, (with enclosure;) Mr. Wraith, (with enclosure;) Mr. May, (with enclosure;) Mr. Woolmer, (with enclosure;) Mr. S. B. Brown, (with enclosure;) Mr. Fenn; Dr. Strong; Dr. Pechey; Mr. Foulds; Mr. T. Fielding, (with enclosure;) Mr. Blake; Dr. Bidwill; Dr. J. Clarke; Mr. Stevens, (with enclosure;) L. F., (with enclosure;) F.R.C.S. Edin.; N. W.; An Ordinary Stolid; Medicus, (with enclosure;) A Young Physician; J. J., (with enclosure;) Aliquis, (with enclosure;) Surgeon; &c. &c.